

CITY OF BLOOMINGTON
2016-201 NORMANDALE BLVD STREET IMPROVEMENT PROJECT
SP 107-020-65
SP 027-634-009
STPM 2716 (052)

Issued: August 8, 2016

The Contractor shall note the following changes and clarifications included in this Addendum #1. Plan sheets 1, 4, 10, 23A-23D, 64, and 81 have changed and are issued with this addendum. Plan sheets 2, 3 and 17 have changed, but are **not** reissued with this addendum.

A revised Proposal form and Contract is included with this addendum. The Proposal form and Contract that is bound in the specification book is no longer valid.

RESPONSES TO BIDDER'S QUESTIONS

The Contractor shall note the following changes and clarifications.

- **Q1:** The FADR does not address the sheet pile wall. Without the geotechnical report addressing the sheet pile wall design parameters we are unable to develop a design (or verify the plan's sheet pile design). The city must have worked with a geotechnical consultant to determine the embedment depths but there is no documentation to support the design that we can verify. Is there more information for us to use to come up with a preliminary design for bidding purposes?
A1: There is no additional information that the City can provide. Please include any additional geotechnical work necessary for the wall design in the bid price.

Q2: Please find our submittal documentation to pre-approve the Preserver™ as an alternate to the SAFL Baffle on the Normandale Boulevard improvement project.

A2: Upon review of the provided information and other available information, the City concludes the Preserver is not approved as an approved equal to the SAFL Baffle and will not be permitted as an approved equal on the project.

Q3: Does the City have any vacant lots that the contractor could utilize for crushing exiting pavement to make gravel for the Normandale Project? Also, would the City allow crushing onsite?

A3: The City does not own any vacant lots nearby that could be used for crushing. With the zoning of the adjacent areas being residential, crushing would not be allowed on-site.

PLAN CHANGES

The following changes shall be made in the Plans:

1. Sheet No. 1 is hereby deleted and preplaced with the attached Sheet No. 1. This sheet is being reissued for the updated index which now includes 204 sheets.
 - Changed the sheet number to 17-23D for the Details & Standard Plates under the Index.

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- Changed the total number of sheets to **204**.
2. Sheet No. 2 is hereby modified. A replacement sheet is not being issued.
 - Add a Planned (P) Quantity to 2105.523 Common Borrow (CV) (P). The total quantity remains at 1194 CY.
 3. Sheet No. 3 is hereby modified. A replacement sheet is not being issued.
 - Changed the quantity of 2533.508 "Relocate Port Precast Conc Bar Des 8337" for a total of 8044.
 4. Sheet No. 4 is hereby deleted and replaced with the attached Sheet No. 4, dated 8/8/2016 in the Revision Block. This sheet is being reissued for added items and revised quantities.
 - Added the item of 2554.501 "Traffic Barrier Design Special" for a total of 25 LF
 - Changed the quantity of 2554.501 "Traffic Barrier Design B8338" for a total of 75 LF
 - Deleted the item of 2554.521 "Anchorage Assembly – Plate Beam"
 - Deleted the item of 2554.523 "End Treatment – Tangent Terminal"
 - Added the item of 2554.523 "End Treatment – Energy Absorbing Terminal" for a total of 1 (EA)
 - Changed the quantity of 2554.615 "Relocate Impact Attenuator" to 7 Amby
 - Changed Note 17 "Shall be CAT-350, Brakemaster or X-MAS"
 5. Sheet No. 10 is hereby deleted and replaced with the attached Sheet No. 10, dated 8/8/ 2016 in the Revision Block. This sheet is being reissued to update Tab J with the revised guardrail information as listed on the SEQ.
 6. Sheet No. 17 is hereby modified. A replacement sheet is not being issued.
 - Modified MnDOT Standard Plate 8318C title to Guardrail Anchorage Plate for Bridges and BCT's
 7. Sheets 23A-23D are hereby added to include the MnDOT Standard Plans: Guardrail Installations at Medians (3 sheets) and Guardrail Installation at Medians and End Treatments (1 sheet)
 8. Sheet No. 64 is hereby deleted and replaced with the attached Sheet No. 64, dated 8/8/2016 in the Revision Block. This sheet is being reissued to modify the note regarding the Traffic Barrier Design Special and End Treatment – Energy Absorbing Terminal.
 9. Sheet No. 81 is hereby deleted and replaced with the attached Sheet No. 81, dated 8/8/2016 in the Revision Block. This sheet is being reissued to modify the fire hydrant location at the church driveway 5' to the east.

SPECIFICATION CHANGES

The following changes shall be made in the Specifications:

1. The following change shall be made to Division S:

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Under S-20 (1404) MAINTENANCE OF TRAFFIC (1707) PUBLIC SAFETY AND (2563) TRAFFIC CONTROL, A. TRAFFIC CONTROL, Item 1. Add the following after the third sentence:

The Contractor shall provide a traffic control layout for work to occur in 2016 behind the existing curb. Pavement removal in 2016 will not be permitted without permission of the Engineer.

2. The following change shall be made to Division S:

Under S-41 (1803;1806) SCHEDULE, COMPLETION DATE, EXECUTION AND APPROVAL OF CONTRACT, B. Working Days, delete the third sentence of the first paragraph that describes Completion.

3. The following change shall be made to Division S:

Under S-41 (1803;1806) SCHEDULE, COMPLETION DATE, EXECUTION AND APPROVAL OF CONTRACT, B. Working Days, Winter Suspension replace the section with the following paragraphs:

On or before November 15, of any given year, all available driving surfaces (roadways, driveways, and entrances) within the Project limits shall be paved with an adequate thickness of bituminous and opened for the safe and convenient use of the lanes, including turn lanes and bypass lanes, by the traveling public for the winter. The bituminous surfaces may be the existing surfacing, the new bituminous wear or non-wear course, or a temporary surfacing placed at the Contractor's expense. Other items of work which must be completed prior to opening the roadways to traffic are traffic signs and pavement markings. The Contractor will be responsible for all maintenance work, including signing, during the winter suspension except the snow plowing of the roadway open to the traveling public which will be done by City and County forces.

The exception to this will be for the traffic control necessary to install the sheet piling wall. Concrete barriers and attenuators will be permitted on the roadway as long as there is a minimum of 4' from the open traffic lane line to the barrier to provide adequate room for snow removal/storage during winter operations.

This provision for opening the roadways to traffic on or before November 15, of any given year, shall apply regardless of the specified working days allowable for the Project or the status of the working days charged as of the date the roadway is opened to traffic. Opening the roadways will have no effect on the charging of working days for any remaining uncompleted portions of the Project.

4. The following change shall be made to Division S:

Under S-41 (1803;1806) SCHEDULE, COMPLETION DATE, EXECUTION AND APPROVAL OF CONTRACT, B. Working Days, Final Completion, add "except punch list work." to the end of the sentence.

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5. The following change shall be made to Division S:
Under S-41 (1803;1806) SCHEDULE, COMPLETION DATE, EXECUTION AND APPROVAL OF CONTRACT, C. Insurance Requirements add the following sentence:

The Contractor will require the subcontractor to have the same policy requirements as listed below, and where applicable will require the subcontractor to provide a certificate of insurance and an actual policy endorsement that names the City and County as an additional insured on the subcontractor's policies.

6. The following change shall be made to Division S:
Under S-41 (1803;1806) SCHEDULE, COMPLETION DATE, EXECUTION AND APPROVAL OF CONTRACT, C. Insurance Requirements, 4. Professional Liability, add the following sentence:

Contractor, and any of its subcontractors, must provide the City and County with a certificate of insurance evidencing the appropriate limits of such coverage.

7. The following change shall be made to Division S:
Under S-66 (2411) PREFABRICATED MODULAR BLOCK WALL (PMBW) WITH AND WITHOUT SOIL REINFORCEMENT, add the following sentence to the end of the third paragraph:

A cap block, matching the Limestone finish, shall be provided on the top of all the prefabricated modular block walls.

8. The following change shall be made to Division S:
Under S-119 (2571) PLANT INSTALLATION, add the following sentences to the end of the last paragraph:

The Contractor will be required to coordinate the planting of these trees with the Engineer to ensure the functionality of the Filtration Trench and the long term viability of the trees. This may require the cutting or other modification of the filter fabric to ensure long term root growth.

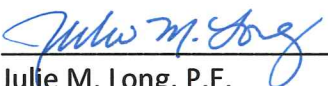
9. The following change shall be made to Division S:
Under S-135 ESTIMATE OF QUANTITIES, add the following items:

Concrete Barrier/Impact Attenuator – install or relocate
Striping, Pavement Messages and Striping Removal (for temporary traffic control)

The Contractor shall include this addendum, along with the revised proposal form, when submitting their bid.

ADDENDUM #1

CITY OF BLOOMINGTON
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| | |
|---|--|
|  Julie M. Long, P.E. Civil Engineer, Infrastructure License No. 25847 | <hr/> Contractor Name <hr/> Printed Name <hr/> Signature <hr/> Title <hr/> Date |
|---|--|

CONTRACT

AND

PROPOSAL

P R O P O S A L

CITY OF BLOOMINGTON

The City Council
City of Bloomington
City Hall
1800 West Old Shakopee Road
Bloomington, MN 55431

***** Bids to be received at the location as stated in the Invitation for Bids *****

Dear Council members:

In accordance with the "Invitation for Bids", inviting proposals for the construction of:

2016-201

Normandale Street Improvement Project

Herein before described and in conformity with the Plans and Specifications on file in the office of the City Engineer, Bloomington, Minnesota, the undersigned hereby certifies that an examination has been made of the Plans and Specifications and the site of the work; and hereby proposed to furnish all necessary machinery, equipment, tools, labor, and other means of construction and to furnish all materials specified and in the manner and at the time prescribed; and understands that the quantities of work shown herein are approximate only and are subject to increase and decrease and further understands that the quantities of work (whether increased or decreased) are to be performed at the following unit prices:

City of Bloomington Contractor Information Sheet

The undersigned agrees, if awarded the Contract, to execute the Contract and undertake the work as stated in these contract documents. The undersigned further agrees to provide the required bonds, insurance and/or guarantees. Accompanying this Proposal is a 5% Bid Security which is subject to forfeiture in event of default by the undersigned. In submitting this bid, it is understood that the City reserves the right to reject any or all bids, and to award the project based on the proposal the City determines to be in its best interest, and it is agreed that this bid may not be withdrawn for a period of thirty (30) days from the opening thereof.

Is your firm in compliance with EEO requirements? ☐ Yes ☐ No

Do you have a safety program in place? ☐ Yes ☐ No

Provide your Experience Modification Rate (EMR or MOD) for workers compensation for the past three (3) years.

20____ EMR/MOD: _____

20____ EMR/MOD: _____

20____ EMR/MOD: _____

For a new firm who has not yet established an Experience Modification Rate, please provide the following information:

1. A summary of any and all accidents and OSHA recordable claims that have occurred to date, and
2. Contact information for your current insurance agent.

If a corporation, what is the state of incorporation?

If a partnership, state full names of all co-partners.

Official Address: _____ Name of Company: _____

_____ By: _____

_____ Title: _____

_____ By: _____

Date: _____ Title: _____

NON-COLLUSION AFFIDAVIT OF PRIME BIDDER

STATE OF MINNESOTA)

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| <u>ITEM NO.</u> | <u>ITEM DESCRIPTION</u> | <u>UNIT</u> | <u>ESTIMATED</u> | <u>UNIT PRICE</u> | <u>EXTENSION</u> |
|------------------------|--------------------------------|--------------------|-------------------------|--------------------------|-------------------------|
| 2011.601 | CONSTRUCTION SURVEYING | LS | 1 | | |
| 2021.501 | MOBILIZATION | LS | 1 | | |
| 2041.610 | TRAINEES | HOURL | 1,500 | | |
| 2101.501 | CLEARING | ACRE | 3.9 | | |
| 2101.502 | CLEARING | TREE | 25 | | |
| 2101.506 | GRUBBING | ACRE | 3.9 | | |
| 2101.507 | GRUBBING | TREE | 20 | | |
| 2102.502 | PAVEMENT MARKING REMOVAL | L F | 5,593 | | |
| 2104.501 | REMOVE WATER MAIN | L F | 176 | | |
| 2104.501 | REMOVE SEWER PIPE (STORM) | L F | 3,292 | | |
| 2104.501 | REMOVE SEWER PIPE (SANITARY) | L F | 84 | | |
| 2104.501 | REMOVE CURB & GUTTER | L F | 12,753 | | |
| 2104.501 | REMOVE RETAINING WALL | L F | 358 | | |
| 2104.501 | REMOVE WOOD RETAINING WALL | L F | 1,100 | | |
| 2104.501 | REMOVE FENCE | L F | 83 | | |
| 2104.501 | REMOVE CHAIN LINK FENCE | L F | 113 | | |
| 2104.501 | REMOVE WOOD FENCE | L F | 987 | | |
| 2104.501 | REMOVE GUARDRAIL | L F | 128 | | |
| 2104.505 | REMOVE CONCRETE WALK | S Y | 677 | | |
| 2104.505 | REMOVE BITUMINOUS PAVEMENT (P) | S Y | 43,729 | | |

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|------------------------|-------------------------------------|--------------------|-------------------------|--------------------------|-------------------------|
| 2104.509 | REMOVE LIGHTING UNIT | EACH | 1 | | |
| 2104.509 | REMOVE MANHOLE OR CATCH BASIN | EACH | 42 | | |
| 2104.509 | REMOVE CASTING | EACH | 2 | | |
| 2104.509 | REMOVE HYDRANT | EACH | 5 | | |
| 2104.509 | REMOVE SIGN | EACH | 54 | | |
| 2104.513 | SAWING BIT PAVEMENT (FULL DEPTH) | L F | 8,006 | | |
| 2104.521 | SALVAGE CHAIN LINK FENCE | L F | 30 | | |
| 2104.521 | SALVAGE WOODEN FENCE | L F | 85 | | |
| 2104.523 | SALVAGE WOOD POST | EACH | 2 | | |
| 2104.523 | SALVAGE LIGHTING UNIT | EACH | 2 | | |
| 2104.523 | SALVAGE SIGN | EACH | 30 | | |
| 2104.523 | SALVAGE MAIL BOX SUPPORT | EACH | 5 | | |
| 2104.602 | SALVAGE SIGN SPECIAL | EACH | 2 | | |
| 2104.602 | SALVAGE ORNAMENTAL METAL GATE | EACH | 2 | | |
| 2105.501 | COMMON EXCAVATION (EV) (P) | CU YD | 58,663 | | |
| 2105.522 | SELECT GRANULAR BORROW (CV) | C Y | 33,861 | | |
| 2105.522 | SELECT GRANULAR BORROW MOD 10% (CV) | C Y | 7,241 | | |
| 2105.523 | COMMON BORROW (CV) (P) | C Y | 1,194 | | |
| 2105.601 | DEWATERING | LS | 1 | | |
| 2105.607 | EXCAVATION SPECIAL (EV), MUCK | C Y | 10,911 | | |

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|------------------------|--|--------------------|-------------------------|--------------------------|-------------------------|
| 2123.610 | STREET SWEEPER (WITH PICKUP BROOM) | HOUR | 168 | | |
| 2130.501 | WATER | MGAL | 112 | | |
| 2211.501 | AGGREGATE BASE CLASS 5 (P) | TON | 25,357 | | |
| 2301.602 | DRILL & GROUT REINF BAR (EPOXY COATED) | EACH | 127 | | |
| 2357.502 | BITUMINOUS MATERIAL FOR TACK COAT | GAL | 7,488 | | |
| 2360.501 | TYPE SP 4.75 WEARING COURSE MIX (2,B) | TON | 32 | | |
| 2360.501 | TYPE SP 12.5 WEARING COURSE MIX (2,B) | TON | 1,798 | | |
| 2360.501 | TYPE SP 12.5 WEARING COURSE MIX (4,F) | TON | 7,510 | | |
| 2360.502 | TYPE SP 19.0 NON WEAR COURSE MIX (4,B) | TON | 13,126 | | |
| 2360.505 | TYPE SP 12.5 BIT MIXTURE FOR PATCHING | TON | 1,572 | | |
| 2411.603 | REINFORCED CONCRETE CAP | L F | 1,615 | | |
| 2411.618 | PREFABRICATED MODULAR BLOCK WALL | S F | 33,093 | | |
| 2451.607 | CRUSHED ROCK (CV) | C Y | 1,866 | | |
| 2452.618 | STEEL SHEET PILING (PERMANENT) | S F | 37,938 | | |
| 2501.515 | 12" RC PIPE APRON | EACH | 1 | | |
| 2501.515 | 15" RC PIPE APRON | EACH | 1 | | |
| 2501.515 | 18" RC PIPE APRON | EACH | 2 | | |
| 2501.515 | 24" RC PIPE APRON | EACH | 5 | | |
| 2501.515 | 27" RC PIPE APRON | EACH | 1 | | |
| 2501.515 | 30" RC PIPE APRON | EACH | 1 | | |

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|------------------------|-----------------------------------|--------------------|-------------------------|--------------------------|-------------------------|
| 2501.602 | REPAIR CULVERT END | EACH | 1 | | |
| 2501.603 | CONCRETE BEDDING | L F | 40 | | |
| 2501.603 | REINFORCED CONCRETE BEDDING | L F | 24 | | |
| 2502.602 | 8" PVC PIPE DRAIN CLEANOUT | EACH | 28 | | |
| 2502.603 | DRAIN TILE | L F | 8,089 | | |
| 2503.511 | 4" PVC PIPE SEWER | L F | 26 | | |
| 2503.511 | 6" PVC PIPE SEWER | L F | 52 | | |
| 2503.511 | 10" PVC PIPE SEWER | L F | 26 | | |
| 2503.511 | 6" C900 PVC PIPE SEWER | LF | 84 | | |
| 2503.541 | 12" RC PIPE SEWER DES 3006 CL V | L F | 49 | | |
| 2503.541 | 15" RC PIPE SEWER DES 3006 CL V | L F | 4,040 | | |
| 2503.541 | 18" RC PIPE SEWER DES 3006 CL V | L F | 312 | | |
| 2503.541 | 24" RC PIPE SEWER DES 3006 CL III | L F | 445 | | |
| 2503.541 | 24" RC PIPE SEWER DES 3006 CL V | L F | 252 | | |
| 2503.541 | 27" RC PIPE SEWER DES 3006 CL III | L F | 22 | | |
| 2503.541 | 30" RC PIPE SEWER DES 3006 CL V | L F | 73 | | |
| 2503.541 | 42" RC PIPE SEWER DES 3006 CL III | L F | 81 | | |
| 2503.541 | 60" RC PIPE SEWER DES 3006 CL III | L F | 478 | | |
| 2503.602 | 6" PVC BACKWATER VALVE | EA | 3 | | |
| 2503.602 | INTERNAL MANHOLE CHIMNEY SEAL | EACH | 15 | | |

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| <u>ITEM NO.</u> | <u>ITEM DESCRIPTION</u> | <u>UNIT</u> | <u>ESTIMATED</u> | <u>UNIT PRICE</u> | <u>EXTENSION</u> |
|------------------------|--------------------------------------|--------------------|-------------------------|--------------------------|-------------------------|
| 2504.602 | 16"X8" TEE FITTING | EACH | 1 | | |
| 2504.602 | HYDRANT | EACH | 5 | | |
| 2504.602 | ADJUST VALVE BOX | EACH | 15 | | |
| 2504.602 | 6"X6" TEE FITTING | EACH | 1 | | |
| 2504.602 | 8"X6" TEE FITTING | EACH | 1 | | |
| 2504.602 | 6" GATE VALVE & BOX | EACH | 6 | | |
| 2504.602 | 8" GATE VALVE & BOX | EACH | 1 | | |
| 2504.602 | RELOCATE CURB STOP & BOX | EACH | 1 | | |
| 2504.602 | ADJUST CURB BOX | EACH | 6 | | |
| 2504.602 | REVISE IRRIGATION SYSTEM | EACH | 3 | | |
| 2504.603 | 6" WATERMAIN DUCTILE IRON CL 52 | L F | 71 | | |
| 2504.603 | 8" WATERMAIN DUCTILE IRON CL 52 | L F | 68 | | |
| 2504.603 | WATERMAIN ENCASEMENT | L F | 179 | | |
| 2504.604 | 6" POLYSTYRENE INSULATION | S Y | 756 | | |
| 2504.608 | DUCTILE IRON FITTINGS | LB | 319 | | |
| 2506.502 | CONST DRAINAGE STRUCTURE DESIGN G | EACH | 1 | | |
| 2506.502 | CATCH BASIN DESIGN SPEC | EACH | 50 | | |
| 2506.502 | CONST DRAINAGE STRUCTURE DES 48-4020 | EACH | 23 | | |
| 2506.502 | CONST DRAINAGE STRUCTURE DES 60-4020 | EACH | 3 | | |
| 2506.502 | CONST DRAINAGE STRUCTURE DES 72-4020 | EACH | 2 | | |

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| <u>ITEM NO.</u> | <u>ITEM DESCRIPTION</u> | <u>UNIT</u> | <u>ESTIMATED</u> | <u>UNIT PRICE</u> | <u>EXTENSION</u> |
|-----------------|--|-------------|------------------|-------------------|------------------|
| 2506.502 | CONST DRAINAGE STRUCTURE DES 84-4020 | EACH | 1 | | |
| 2506.502 | CONST DRAINAGE STRUCTURE DES 96-4020 | EACH | 6 | | |
| 2506.516 | CASTING ASSEMBLY | EACH | 2 | | |
| 2506.522 | ADJUST FRAME & RING CASTING | EACH | 12 | | |
| 2506.602 | RECONSTRUCT MANHOLES | EACH | 8 | | |
| 2506.602 | RECONSTRUCT DRAINAGE STRUCTURE | EACH | 1 | | |
| 2506.602 | CONST DRAINAGE STRUCTURE DESIGN SPEC 1 | EACH | 3 | | |
| 2506.602 | STANDARD CATCH BASIN | EACH | 80 | | |
| 2511.501 | RANDOM RIPRAP CLASS III (P) | C Y | 61 | | |
| 2511.511 | GRANULAR FILTER (P) | C Y | 5.1 | | |
| 2521.501 | 4" CONCRETE WALK | S F | 16,065 | | |
| 2521.501 | 6" CONCRETE WALK | S F | 4,376 | | |
| 2521.501 | 8" CONCRETE WALK | S F | 948 | | |
| 2521.501 | 4" CONCRETE WALK SPECIAL 1 | S F | 10,317 | | |
| 2531.501 | CONCRETE CURB & GUTTER DESIGN B424 | L F | 20,699 | | |
| 2531.501 | CONCRETE CURB & GUTTER DESIGN B612 | L F | 306 | | |
| 2531.501 | CONCRETE CURB & GUTTER DESIGN B618 | L F | 358 | | |
| 2531.501 | CONCRETE CURB & GUTTER DESIGN D412 | L F | 105 | | |
| 2531.602 | CONCRETE MEDIAN NOSE | EACH | 11 | | |
| 2531.618 | TRUNCATED DOMES | S F | 493 | | |

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| <u>ITEM NO.</u> | <u>ITEM DESCRIPTION</u> | <u>UNIT</u> | <u>ESTIMATED</u> | <u>UNIT PRICE</u> | <u>EXTENSION</u> |
|------------------------|---|--------------------|-------------------------|--------------------------|-------------------------|
| 2533.507 | PORTABLE PRECAST CONCR BARRIER DES 8337 | L F | 7,678 | | |
| 2533.508 | RELOCATE PORT PRECAST CONC BAR DES 8337 | L F | 8,044 | | |
| 2540.602 | INSTALL MAIL BOX SUPPORT | EACH | 5 | | |
| 2540.603 | LANDSCAPE EDGER | L F | 206 | | |
| 2545.511 | LIGHTING UNIT TYPE SPECIAL | EACH | 1 | | |
| 2545.515 | LIGHT FOUNDATION DESIGN E MODIFIED | EACH | 1 | | |
| 2545.523 | 2" NON-METALLIC CONDUIT | L F | 110 | | |
| 2545.531 | UNDERGROUND WIRE 1 COND NO 6 | L F | 330 | | |
| 2545.602 | INSTALL LIGHTING UNIT | EACH | 2 | | |
| 2550.602 | INSTALL WOOD POST | EACH | 2 | | |
| 2554.501 | TRAFFIC BARRIER DESIGN SPECIAL | L F | 25 | | |
| 2554.501 | TRAFFIC BARRIER DESIGN B8338 | L F | 75 | | |
| 2554.523 | END TREATMENT-ENERGY ABSORBING TERMINAL | EACH | 1 | | |
| 2554.615 | IMPACT ATTENUATOR | AMBY | 12 | | |
| 2554.615 | RELOCATE IMPACT ATTENUATOR | AMBY | 7 | | |
| 2557.501 | WIRE FENCE DESIGN SPECIAL VINYL COATED | L F | 3,258 | | |
| 2557.516 | PEDESTRIAN GATE DESIGN SPECIAL | EACH | 12 | | |
| 2557.517 | VEHICULAR GATE-DOUBLE | EACH | 1 | | |
| 2557.602 | INSTALL ORNAMENTAL METAL GATE | EACH | 2 | | |
| 2557.603 | TEMPORARY FENCE DESIGN SPECIAL | L F | 550 | | |

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PROPOSAL FORM - ADDENDUM 1

| <u>ITEM NO.</u> | <u>ITEM DESCRIPTION</u> | <u>UNIT</u> | <u>ESTIMATED</u> | <u>UNIT PRICE</u> | <u>EXTENSION</u> |
|-----------------|--------------------------------------|-------------|------------------|-------------------|------------------|
| 2557.603 | WOODEN FENCE | L F | 2,610 | | |
| 2557.603 | INSTALL CHAIN LINK FENCE | L F | 30 | | |
| 2557.603 | FENCE, CEDAR SPLIT RAIL | LF | 155 | | |
| 2563.601 | TRAFFIC CONTROL | LS | 1 | | |
| 2563.602 | PORTABLE CONCRETE BARRIER DELINEATOR | EACH | 770 | | |
| 2563.610 | POLICE OFFICER | HOURL | 40 | | |
| 2563.613 | PORTABLE CHANGEABLE MESSAGE SIGN | UDAY | 96 | | |
| 2563.618 | CONSTRUCTION SIGN-SPECIAL | S F | 112 | | |
| 2564.531 | SIGN PANELS TYPE C | S F | 253.65 | | |
| 2564.550 | DELINEATOR TYPE X4-13 | EACH | 2 | | |
| 2564.550 | SIGN TYPE SPECIAL | EACH | 6 | | |
| 2564.552 | HAZARD MARKER X4-2 | EACH | 8 | | |
| 2564.602 | INSTALL SIGN | EACH | 2 | | |
| 2564.602 | INSTALL SIGN TYPE SPECIAL | EACH | 2 | | |
| 2565.601 | TRAFFIC CONTROL INTERCONNECTION | LS | 1 | | |
| 2565.616 | REVISE SIGNAL SYSTEM | SYS | 1 | | |
| 2571.501 | CONIFEROUS TREE 6' HT B&B | TREE | 106 | | |
| 2571.502 | DECIDUOUS TREE 1.75" CAL BR | TREE | 27 | | |
| 2571.502 | DECIDUOUS TREE 2.5" CAL B&B | TREE | 96 | | |
| 2571.504 | CONIFEROUS SHRUB 2.5' HT CONT | SHRB | 9 | | |

2016-201 NORMANDALE STREET IMPROVEMENT PROJECT

SP 107-020-065, SP 027-634-009 STPM 2716 (052)

PROPOSAL FORM - ADDENDUM 1

| <u>ITEM NO.</u> | <u>ITEM DESCRIPTION</u> | <u>UNIT</u> | <u>ESTIMATED</u> | <u>UNIT PRICE</u> | <u>EXTENSION</u> |
|-----------------|--------------------------------------|-------------|------------------|-------------------|------------------|
| 2571.505 | DECIDUOUS SHRUB 2.5' HT CONT | SHRB | 21 | | |
| 2571.505 | DECIDUOUS SHRUB 3' HT CONT | SHRB | 46 | | |
| 2571.507 | PERENNIAL NO 1 CONT | PLT | 2,431 | | |
| 2571.507 | PERENNIAL NO 2 CONT | PLT | 625 | | |
| 2573.502 | SILT FENCE, TYPE HI | L F | 10,262 | | |
| 2573.530 | STORM DRAIN INLET PROTECTION | EACH | 215 | | |
| 2573.533 | SEDIMENT CONTROL LOG TYPE COMPOST | L F | 2,529 | | |
| 2573.550 | EROSION CONTROL SUPERVISOR | LS | 1 | | |
| 2573.602 | TEMPORARY ROCK CONSTRUCTION ENTRANCE | EACH | 4 | | |
| 2574.525 | FILTER TOPSOIL BORROW SPECIAL | C Y | 1,849 | | |
| 2574.525 | LOAM TOPSOIL BORROW | C Y | 4,481 | | |
| 2575.505 | SODDING TYPE LAWN | S Y | 6,341 | | |
| 2575.513 | MULCH MATERIAL TYPE 6 | C Y | 214 | | |
| 2575.513 | MULCH MATERIAL TYPE 9 | C Y | 474 | | |
| 2575.571 | RAPID STABILIZATION METHOD 3 | MGAL | 17.41 | | |
| 2575.572 | RAPID STABILIZATION METHOD 4 | S Y | 4,596 | | |
| 2582.501 | PAVT MSSG PAINT | S F | 64 | | |
| 2582.501 | PAVT MSSG PREFORM TAPE GROUND IN | S F | 176 | | |
| 2582.502 | 6" DOTTED LINE WHITE-PAINT | L F | 57 | | |
| 2582.502 | 4" SOLID LINE WHITE-PAINT | L F | 1,744 | | |

2016-201 NORMANDALE STREET IMPROVEMENT PROJECT

SP 107-020-065, SP 027-634-009 STPM 2716 (052)

PROPOSAL FORM - ADDENDUM 1

| <u>ITEM NO.</u> | <u>ITEM DESCRIPTION</u> | <u>UNIT</u> | <u>ESTIMATED</u> | <u>UNIT PRICE</u> | <u>EXTENSION</u> |
|-----------------|--|-------------|------------------|-------------------|------------------|
| 2582.502 | 4" BROKEN LINE WHITE-PAINT | L F | 2,200 | | |
| 2582.502 | 4" SOLID LINE YELLOW-PAINT | L F | 890 | | |
| 2582.502 | 4" DOTTED LINE YELLOW-PAINT | L F | 1,953 | | |
| 2582.502 | 4" DOUBLE SOLID LINE YELLOW-PAINT | L F | 18,929 | | |
| 2582.502 | 8" SOLID LINE WHITE-EPOXY | L F | 200 | | |
| 2582.502 | 4" BROKEN LINE WHITE-EPOXY | L F | 2,745 | | |
| 2582.502 | 4" SOLID LINE WHITE-EPOXY-GR IN | L F | 950 | | |
| 2582.502 | 4" DBLE SOLID LINE YELLOW-EPOXY- GR IN | L F | 645 | | |
| 2582.503 | CROSSWALK PREF THERMO GR IN | S F | 450 | | |

2016-201 PROJECT TOTAL = _____

COUNTY OF HENNEPIN)

_____ being first duly sworn deposes and says that:

(1) He/She is _____ of _____
OWNER, PARTNER, OFFICER REPRESENTATIVE OR AGENT

_____, the Bidder that has submitted the attached bid;

(2) He/She is fully informed respecting the preparation and contents of the attached Bid and of all pertinent circumstances respecting such Bid;

(3) Such Bid is genuine and is not a collusive or sham Bid;

(4) Neither the said Bidder nor any of its officers, partners, owners, agents, representatives, employees or parties in interest, including this affiant, has in any way colluded, conspired, agreed, directly or indirectly, with any other Bidder, firm or person to submit a collusive or sham Bid in connection with the Contract for which the attached Bid has been submitted or to refrain from bidding in connection with such Contract, or has in any manner, directly or indirectly, sought by agreement or collusion or communication or conference with any other Bidder, firm or person to fix the price or prices of the bid price or the bid price of any other Bidder, or to secure through any collusion, conspiracy, connivance or unlawful agreement any advantage against the City of Bloomington or any person interested in the proposed Contract and;

(5) The price or prices quoted in the attached Bid are fair and proper and are not tainted by any collusion, conspiracy, or unlawful agreement on the part of the Bidder or any of its agents, representatives, owners, employees, or parties in interest, including this affiant.

(Signed) _____

Subscribed and sworn to before me

this _____ day of _____, 20_____

(Notary Public)

My commission expires _____

Insert Attachment A
Responsible Contractor Certification of Compliance
Here

CONTRACT

THIS AGREEMENT, made on the _____ day of _____, 2016, by and between the CITY OF BLOOMINGTON, party of the first part, hereinafter called the CITY, and _____ party of the second part, hereinafter called the CONTRACTOR.

WITNESSETH, that the Contractor and the City, for the considerations hereinafter named, agree as follows:

I. SCOPE OF WORK

The Contractor hereby agrees to furnish all of the materials, equipment and labor necessary, and to perform all of the Work shown on the Plans and described in the Specifications for the Project entitled:

2016-201

Normandale Street Improvement Project

in accordance with the requirements and provisions of the Contract Documents as defined in the General Specifications which are hereby made a part of this Agreement.

II. TIME OF COMPLETION

The Work to be performed under this Contract shall be commenced within eight (8) calendar days after the date of written notice by the City to the Contractor to proceed. The construction of the improvements shall be completed as specified in the Special Provisions.

III. PAYMENT

A. The Contract Sum - The City shall pay to the Contractor, for the duration of the Agreement the amounts determined for the total number of units of Work completed at the unit price stated in the attached Bid Proposal. The number of units contained in this Bid Proposal is an approximation only, and the final payment shall be made for the actual number of units that are installed, constructed or otherwise incorporated as part of the Work covered by the Agreement.

B. Progress Payments

1. The City Engineer shall prepare an estimate covering the total quantities under each item of Work that has been completed from the start of the job, up to and including the last day of the preceding month, and the value of the Work completed, determined in accordance with the schedule of unit prices for such items, on or not later than the fifth (5th) day of each month. This estimate shall also include an allowance for the cost of such materials and equipment required to perform the permanent Work as has been delivered to the site and suitably protected by the Contractor but not as yet incorporated in the Work.

2. The City shall pay to the Contractor an amount which, together with previous payments, equals 95% of the amount of the monthly estimate of the City Engineer, not later than the fifteenth (15th) day of the month.
3. Upon the determination of the City Engineer that the Work of the project is 95% or more completed, the City shall release such portions of the retained contract price as the City Engineer determines are not required to be retained to protect the City's interest in satisfactory completion of the Agreement.

IV. ACCEPTANCE AND FINAL PAYMENT

- A. Upon receipt of written notice that the Work is ready for final inspection and acceptance, the City Engineer shall within ten (10) days make such inspection. When he/she finds the Work acceptable under the Contract and the Contract fully performed, he/she will issue a final estimate (i.e., final pay application or final payment). The final estimate shall constitute final acceptance and serve as the final certificate for the project.
- B. Before final payment is due, the Contractor shall submit evidence satisfactory to the City Engineer that all payrolls, material bills, and other indebtedness connected with the Work have been paid, except that in case of disputed indebtedness of liens the Contractor may submit in lieu of evidence of payment a surety bond satisfactory to the City guaranteeing payment of all such disputed amounts when adjudicated in cases where such payment has not already been guaranteed by Surety Bond.
- C. The making and acceptance of the final payment shall constitute a waiver of all claims by both parties, other than those arising from:
 1. Unsettled liens;
 2. From faulty Work appearing within 12 months after final payment;
 3. From requirements of the specifications, or from manufacturers' guarantee; and/or
 4. Claims previously made and still unsettled.

V. AUDIT

All books, records, documents and accounting procedures and practices of the Contractor relevant to this Contract shall, pursuant to Minn. Stat. § 16C.05, subd. 5 be subject to examination at all times by the City, and as appropriate, by either the legislative or state auditor.

VI. PRIORITY

If there is a conflict or inconsistency between this Agreement and the Specifications and Special Provisions, the parties agree to the following priority of documents:

- A. This Agreement.
- B. Special Provisions and Specifications

VII. INDEPENDENT CONTRACTOR

It is agreed that nothing herein contained is intended or should be construed in any manner as creating or establishing the relationship of copartners between the parties hereto or as constituting the Contractor's staff as the agents, representatives or employees of the City for any purpose in any manner whatsoever. The Contractor and its staff are to be and shall remain an independent Contractor with respect to all services performed under this Agreement. The Contractor represents that it has, or will secure at its own expense, all personnel required in performing services under this Agreement. Any and all personnel of the Contractor or other persons, while engaged in the performance of any work or services required by the Contractor under this Agreement shall not be considered employees of the City, and any and all claims that may or might arise under the Workers' Compensation Act of the State of Minnesota on behalf of said personnel or other persons while so engaged, and any and all claims whatsoever on behalf of any such person or personnel arising out of employment or alleged employment including, without limitation, claims of discrimination against the Contractor, its officers, agents, contractors or employees shall in no way be the responsibility of the City; and the Contractor shall defend, indemnify and hold the City, its officers, agents and employees harmless from any and all such claims regardless of any determination of any pertinent tribunal, agency, board, commission or court. Such personnel or other persons shall not require nor be entitled to any compensation, rights or benefits of any kind whatsoever from the City, including, without limitation, tenure rights, medical and hospital care, sick and vacation leave, Workers' Compensation, Unemployment Compensation, disability, severance pay and PERA.

VIII. MISCELLANEOUS

- A. The Contractor shall furnish within seven (7) days after notice of acceptance of the bid two (2) bonds, a performance and payment bond, each in the amount of the full contract price, and in compliance with State statutes to guarantee the faithful performance of the Contract and the payment of all labor, mechanics, subcontractors and material. In addition to the term of this Agreement, the performance bond shall cover an additional one (1) year period after final acceptance by the City, with respects to faulty workmanship and materials. Both bonds shall be furnished by a corporate surety company authorized to do business in the state of Minnesota and acceptable to the City subject to the approval of the City Attorney as to form.
- B. To the fullest extent allowed by law the Contractor shall defend, indemnify and hold harmless the City of Bloomington, its officials, employees and agents, from any and all claims, causes of action, lawsuits, damages, losses, or expenses, including attorney fees, arising out of or resulting from the Contractor's (including its officials, agents, or employees) performance of the duties required under this Agreement, provided that any such claim, damages, loss or expense is attributable to bodily injury, sickness, diseases or death or to injury to or destruction of property including the loss of use resulting therefrom and is caused in whole or in part by any negligent act or omission or willful misconduct of Contractor.

- C. The Contractor shall not commence work under this Contract until all insurance required under this article has been obtained and until copies of policies and certificates required by this article are submitted to: Office of the City Clerk, 1800 West Old Shakopee Road, Bloomington, MN 55431. The Contractor shall not allow any subcontractor to commence work on the project until subcontractor's insurance has been obtained and submitted to the Contractor. The Contractor will require the subcontractor to have the same policy requirements as listed below, and where applicable will require the subcontractor to provide a certificate of insurance and an actual policy endorsement that names the City and County as an additional insured on the subcontractor's policies.

1. Commercial General Liability and Property Damage Insurance.

The Contractor shall take out and maintain at its own cost and expense, commercial general liability and property damage insurance, during the period from the commencement until final completion of the any and all work under this contract. To the fullest extent allowed by law, said insurance shall protect the Contractor, any subcontractor performing work covered by the Contract, and the City from claims for any injury or property damage which may arise from operations under this Contract, whether operations be made by the Contractor, subcontractor, or by anyone directly or indirectly employed by either of them. This also includes claims arising by reason of any injury or damage sustained after the Contractor has completed the work or left the site thereof. The commercial general liability insurance shall be in the following amounts:

Bodily injury in the amount of at least \$1,500,000 per occurrence and \$1,500,000 for injuries or death arising out of each occurrence.

Property damage liability in the amount of \$1,500,000 for each occurrence.

To meet the above requirements, the Contractor may use a combination of Commercial General Liability and Umbrella coverage, as long as the City approves such use and it is evidenced on the Certificate of Insurance naming the City as an additional insured on both policies. The Umbrella needs to be a following form coverage and provide a thirty (30) day notice of cancellation.

2. Worker's Compensation Insurance and Employer's Liability.

The Contractor shall carry Worker's Compensation Insurance as required by Minnesota Statutes, Section 176.181 subd 2.

Employer's Liability – Bodily injury by:

| | |
|--------------------------|-----------|
| Accident – Each Accident | \$500,000 |
| Disease – Policy Limit | \$500,000 |
| Disease – Each Employee | \$500,000 |

3. Business Automobile Liability Insurance.

Contractor shall secure and maintain during the life of this Contract business automobile liability insurance in the minimum amount of \$1,500,000 for bodily injuries, including death, per occurrence; and automobile property damage insurance in the minimum amount of \$1,500,000. Each motor vehicle, including hired vehicles, engaged in operation within the terms of this Contract shall be covered by such automobile insurance.

4. Professional Liability

| | |
|-----------|-------------|
| Per Claim | \$1,500,000 |
| Aggregate | \$2,000,000 |

5. Certificates.

The Contractor further agrees to name the City and County as additionally insured on the commercial general liability and business automobile liability insurance policies. Copies of all certificates, endorsements and policies, naming the City as additionally insured, shall be filed with the City Clerk. The certificates shall be executed by the insurer and shall expressly stipulate that the policies are non-cancelable until after thirty (30) days notice in writing to the City. The canceling company and/or the replacing company shall be responsible for all work completed prior to the cancellation of policies. All insurance policies and certificates shall be submitted prior to the execution of the Contract and shall be subject to the approval of the City Attorney.

- D. In the event of a dispute between the City and the Contractor, the parties hereto agree that the City Engineer shall determine the amount and quality of work in the Improvements included in the Contract. If no agreement can be reached, the City and the Contractor agree to submit all claims, disputes and other matters in question between the parties arising out of or relating to this Agreement to mediation. The mediation shall be conducted through the Conflict Resolution Center, 2101 Hennepin Avenue, Suite 100, Minneapolis, MN 55405. The parties hereto shall decide whether mediation shall be binding or non-binding. If the parties cannot reach agreement, mediation shall be non-binding. In the event mediation is unsuccessful, either party may exercise its legal or equitable remedies and may commence such action prior to the expiration of the applicable statute of limitations.
- E. The Contractor agrees to comply with the Americans with Disabilities Act (ADA), Section 504 of the Rehabilitation Act of 1973 and not discriminate on the basis of disability in the admission or access to, or treatment of employment in its services, programs, or activities. The Contractor agrees to hold harmless and indemnify the City from costs, including but not limited to damages, attorney's fees and staff time, in any action or proceeding brought alleging a violation of ADA and/or Section 504 caused by the Contractor. Upon request accommodation will be provided to allow individuals with disabilities to participate in all services, programs and activities. The City has designated coordinators to facilitate compliance with the Americans with Disabilities Act of 1990, as required by Section 35.107 of the U.S. Department of Justice regulations, and to coordinate compliance with Section 504 of the Rehabilitation Act of 1973, as mandated by Section 8.53 of the U.S. Department of Housing and Urban Development regulations.
- F. The parties agree to comply with the Minnesota State Human Rights Act, Minnesota Statutes, Section 363A, as amended.

- G. The parties hereto agree to comply with Section 504 of the Rehabilitation Act of 1973/31 CFR Part 51. This Act states in part that, "...all recipients of federal funds, whether in the form of a grant or a contract, review, and if necessary modify, their programs and activities so that discrimination based on handicap is eliminated."
- H. The Contractor will comply with all applicable provisions of the Minnesota Government Data Practices Act, Chapter 13 of the Minnesota Statutes.
- I. The Contractor agrees that the City will own and have the right to use, reproduce and apply as it desires, any data, reports, analyses and materials which are collected or developed by the Contractor or anyone acting on behalf of the Contractor as a result of this Agreement.
- J. The Contractor agrees that it must pay any subcontractor within ten (10) days of the Contractor's receipt of payment from the City for undisputed services provided by the subcontractor. The Contractor agrees to pay interest of 1-1/2 percent per month, or any part of a month, to the subcontractor on any undisputed amount not paid on time to the subcontractor. The minimum monthly interest penalty payment for an unpaid balance of \$100 or more is \$10. For an unpaid balance of less than \$100, the prime Contractor shall pay the actual penalty due to the subcontractor. A subcontractor who prevails in a civil action to collect interest penalties from a prime Contractor must be awarded its costs and disbursements, including attorneys fees, incurred in bringing the action.
- K. Any material alterations, variations, modifications or waivers of provisions of this Agreement shall be valid only when they have been reduced to writing as an amendment to this Agreement and signed by both parties.
- L. Either party may terminate this Agreement, for any reason, upon giving thirty (30) days advanced written notice to the other party.

The City reserves the right to cancel this Agreement at any time in event of default or violation by the Contractor of any provision of this Agreement. The City may take whatever action at law or in equity that may appear necessary or desirable to collect damages arising from a default or violation or to enforce performance of this Agreement.

- M. This Agreement shall not be assignable except at the written consent of the City.
- N. This Agreement represents the entire Agreement between the Contractor and the City and supersedes and cancels any and all prior agreements or proposals, written or oral, between the parties relating to the subject matter hereof, and amendments, addenda, alterations, or modifications to the terms and conditions of this Agreement shall be in writing and signed by both parties.
- O. The Contractor agrees, as a condition of being awarded this Contract, to require each of its agents, officers and employees to abide by the City of Bloomington's policies prohibiting sexual harassment, firearms and smoking, as well as all other reasonable work rules, safety rules or policies regulating the conduct of persons on City property at all times while performing duties pursuant to this Contract. The Contractor agrees and understands that a violation of any of these policies or rules constitutes a breach of the Contract and sufficient grounds for immediate termination of the Contract by the City.

P. The parties agree that this Agreement shall be governed by the laws of the State of Minnesota.

Q. Pursuant to Chapter 2, Article VII of the City Code, the Contractor agrees as follows:

1. That, in the hiring of common or skilled labor for the performance of any work under any contract, or any subcontract, no contractor, material supplier, or vendor, shall, by reason of race, creed, or color, discriminate against the person or persons who are citizens of the United States or resident aliens who are qualified and available to perform the work to which the employment relates;
2. That no contractor, material supplier, or vendor, shall, in any manner, discriminate against, or intimidate, or prevent the employment of any person or persons identified in clause (1) of this section, or on being hired, prevent, or conspire to prevent, the person or persons from the performance of work under any contract on account of race, creed, or color;
3. That a violation of this section is a misdemeanor; and
4. That this contract may be canceled or terminated by the City, and all money due, or to become due under the contract, may be forfeited for a second or any subsequent violation of the terms or conditions of this contract.

R. Signature/Execution: The person signing this Agreement (hereafter "Signatory") represents and warrants that the Contractor has authorized him/her to execute this Agreement on its behalf and agrees to be bound by its terms and conditions, including the agreement of the Contractor to indemnify and hold the City harmless. In the event the Contractor did not authorize the Signatory to sign on its behalf, the Signatory agrees to assume responsibility for the duties and liability of the Contractor, as set forth herein, personally.

IN WITNESS WHEREOF the parties hereto have executed this Agreement, the date and year first written above.

City of Bloomington

DATED:_____

By:_____

Mayor

DATED:_____

By:_____

City Manager

Reviewed and approved by the City Attorney.

City Attorney

Contractor

DATED:_____

By:_____

Title of Signatory:_____

Name of Company:_____

MINNESOTA DEPARTMENT OF TRANSPORTATION

CITY OF BLOOMINGTON, ENG. DIV.

BLOOMINGTON PROJECT NO. 2016-201

COUNTY PROJECT NO. 9748

LOCATED ON : CSAH 34 (NORMANDALE BLVD), FROM W. 94th ST TO 8500 BLOCK IN BLOOMINGTON

CONSTRUCTION PLAN FOR: STORM SEWER, GRADING, BASE, BITUMINOUS SURFACE, CURB & GUTTER, RETAINING WALLS, AND SIGNALS

LEGEND

| EXISTING | PROPOSED |
|--------------------------|----------|
| CENTER LINE | --- |
| PROPERTY LINE | --- |
| PERM. EASEMENT LINE | --- |
| TEMP. EASEMENT LINE | --- |
| CURB & GUTTER LINE | --- |
| REMOVE CURB AND GUTTER | --- |
| SAN SEWER LINE | --- |
| SAN SEWER SERVICE LINE | --- |
| WATER LINE | --- |
| WATER SERVICE LINE | --- |
| WATER SRVC. LINE (ABAN.) | --- |
| COMMUNICATION LINE | --- |
| GAS LINE | --- |
| STORM SEWER | --- |
| TELEPHONE CABLE | --- |
| MANHOLE | --- |
| CATCH BASIN | --- |
| HYDRANT | --- |
| WATER VALVE | --- |
| WATER VALVE IN MANHOLE | --- |
| RAILROAD | --- |
| CONIFEROUS TREE | --- |
| DECIDUOUS TREE | --- |
| CLEAR AND GRUB TREE | --- |
| HEDGE | --- |
| UTILITY POLE | --- |
| LIGHT POLE | --- |
| UTILITY POLE W/ LIGHT | --- |
| GUY WIRE | --- |
| TRAFFIC SIGNAL | --- |
| BLOCK RETAINING WALL | --- |
| WOOD RETAINING WALL | --- |
| TREE LINE | --- |
| CHAIN LINK FENCE | --- |
| WOOD FENCE | --- |
| WIRE FENCE | --- |
| EROSION CONTROL FENCE | --- |
| INLET PROTECTION | --- |
| SANITARY MANHOLE | --- |
| STORM MANHOLE | --- |
| CONCRETE WALK | --- |
| BITUMINOUS SURFACE | --- |
| REMOVE CONCRETE WALK | --- |
| REM. BITUMINOUS SURF. | --- |
| CONCRETE WALK SPECIAL | --- |
| GRAVEL SURFACE | --- |
| MILL BITUMINOUS SURFACE | --- |
| BUILDING | --- |
| TOP BACK OF CURB | T.B.C. |
| HIGH POINT | H.P. |

STATE PROJ. NO. 107-020-065, 027-634-009

GROSS LENGTH 5579.00 FEET 1.057 MILES

BRIDGES-LENGTH 0.00 FEET 0 MILES

EXCEPTIONS-LENGTH 0.00 FEET 0 MILES

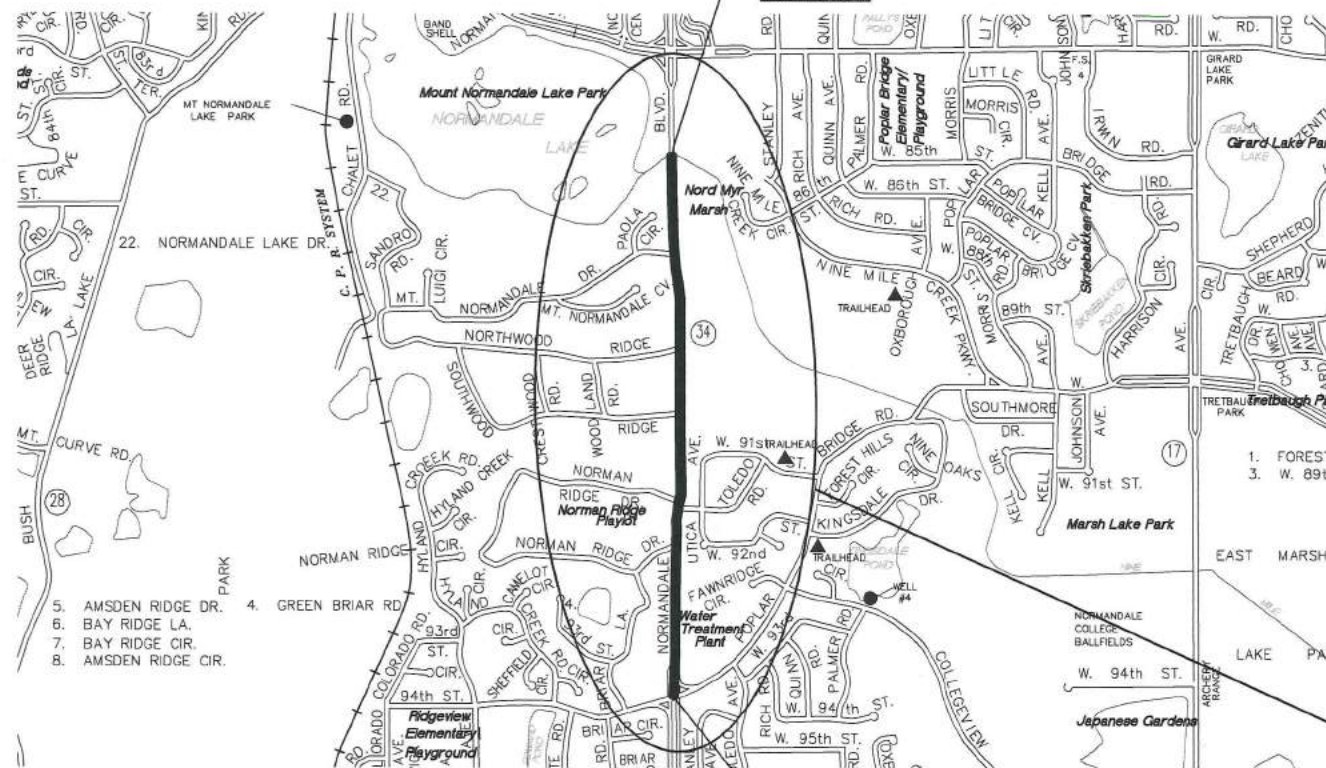
NET LENGTH 5579.00 FEET 1.057 MILES

REF. POINT STA. 113+04 TO REF. POINT STA. 168+83

FROM: 50' NORTH OF THE N.W. CORNER OF SECTION 18,
T. 27, R. 24.

TO: 200' NORTH OF THE N.W. CORNER OF SECTION 7,
T. 27, R. 24.

END S.P. 107-020-065, 027-634-009
NORMANDALE BLVD (CSAH 34)
STA 168+83



PROJECT LOCATION

COUNTY : HENNEPIN

DISTRICT : METRO

S.6,7,18 T.027N R.24W

S.16,21,28 T.116N R.21W

SCALE IN FEET

PLAN 0 30
PROFILE 0 30 0 5
INDEX MAP 0 1000



PROJECT LOCATION

NORMANDALE BLVD (CSAH 34)
DESIGN DESIGNATION (ROADWAY)

Present ADT (2016) = 27,900

No. of Traffic Lanes = 4

Soil Factor = 50

Design Speed = 45 MPH

RVALUE = 30

ESALS = 10,300,000

Functional Classification = A-Minor Arterial-Expander

Stopping Sight Distance Based On: 3.5' Height Of Eyes And
2.0' Height Of Object

Projected ADT (2036) = 40,600

No. Of Parking Lanes = 0

Projected HCADT (2036) = 3,248 (8%)

Ton Design = 10 ton

DESIGN DESIGNATION (MULTI-USE TRAIL)

Design Speed = 20 MPH

Stopping Sight Distance Based On: 4.50' Height Of Eyes And 0' Height Of Object

MINN. PROJ. NO. STPM 2716(052)

GOVERNING SPECIFICATIONS

THE 2016 EDITION OF THE MINNESOTA DEPARTMENT OF TRANSPORTATION
"STANDARD SPECIFICATIONS FOR CONSTRUCTION" SHALL GOVERN.

ALL TRAFFIC CONTROL DEVICES AND SIGNING SHALL CONFORM TO THE
MINNESOTA MANUAL ON UNIFORM TRAFFIC CONTROL, INCLUDING THE
"FIELD MANUAL FOR TEMPORARY TRAFFIC CONTROL ZONE LAYOUTS".

INDEX

| SHEET NO. | SHEET DESCRIPTION |
|-----------|---|
| 1 | TITLE SHEET |
| 2-4 | STATEMENT OF ESTIMATED QUANTITIES |
| 5-12 | QUANTITY TABULATIONS |
| 13-14 | PRIVATE UTILITY TABULATION |
| 15-16 | ALIGNMENTS, HORIZONTAL & VERTICAL CONTROL |
| 17-23D | DETAILS & STANDARD PLATES |
| 24-27 | TYPICAL SECTIONS |
| 28-34 | SWPPP |
| 35-48 | CONSTRUCTION PHASING & TRAFFIC CONTROL |
| 49-56 | REMOVAL PLANS |
| 57-64 | PROPOSED CONSTRUCTION PLANS |
| 65-71 | PROFILES |
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| 113-120 | PEDESTRIAN CURB RAMP PLANS |
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| 129-134 | SIGNING AND PVT MARKINGS PLANS |
| 135-150 | SIGNAL PLANS |
| 151-159 | INTERCONNECT PLANS |
| 160-161 | LIGHTING PLANS |
| 162-174 | LANDSCAPING PLANS |
| 175-177 | EARTHWORK SUMMARY |
| 178-200 | CROSS SECTIONS |

THIS PLAN CONTAINS 204 SHEETS

DESIGN ENGINEER: I HEREBY CERTIFY THAT SHEETS 1-128 AND
162-200 WERE PREPARED BY ME OR UNDER MY DIRECT SUPERVISION
AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER
THE LAWS OF THE STATE OF MINNESOTA.

BY JULIE M. LONG
DATE 5/16/16 LIC. NO. 25847

TRAFFIC ENGINEER: I HEREBY CERTIFY THAT SHEETS 129-161 WERE
PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I
AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF
THE STATE OF MINNESOTA.

BY KIRK ROBERTS
DATE 5/16/16 LIC. NO. 48426

APPROVED 5/16/16
CITY OF BLOOMINGTON ENGINEER DATE

RECOMMENDED 5/31/16
FOR APPROVAL HENNEPIN COUNTY DESIGN DIV ENGINEER DATE

APPROVED 5/31/16
HENNEPIN COUNTY HIGHWAY ENGINEER DATE

6/22/16
DIST. STATE AID ENGINEER: REVIEWED FOR COMPLIANCE DATE

WITH STATE AND FEDERAL AID RULES/POLICY

6/22/16
APPROVED FOR STATE AID AND FEDERAL AID FUNDING: DATE

STATE AID ENGINEER

I HEREBY CERTIFY THAT THE FINAL FIELD REVISIONS, IF ANY, OF
THIS PLAN WERE MADE BY ME OR UNDER MY DIRECT SUPERVISION
AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER
THE LAWS OF THE STATE OF MINNESOTA.

DATE _____ LIC. NO. _____

STATE PROJ. NO.'S 107-020-065, 027-634-009

SHEET NO. 1 OF 200

| STATEMENT OF ESTIMATED QUANTITIES: 2016-201 NORMANDALE BLVD IMPROVEMENT PROJECT | | | | | | | | | | | | | | | | |
|---|----------|---|-------|------|-----|--|------------------------------|-------|---------------|-------|----------------|-------|---------------|-------|-----------------|-------|
| | ITEM | | | | | | SP 107-020-065 & 027-634-009 | | | | NON-PART. | | | | | |
| | | | | | | | TOTAL PROJECT | | ROADWAY QUAN. | | ST. SWR. QUAN. | | ROADWAY QUAN. | | LANDSCAPE QUAN. | |
| TAB. | NUMBER | ITEM DESCRIPTION | NOTES | UNIT | | | QUANTITIES | | | | | | | | | |
| | | | | | | | ESTIMATE | FINAL | ESTIMATE | FINAL | ESTIMATE | FINAL | ESTIMATE | FINAL | ESTIMATE | FINAL |
| X | 2545.523 | 2" Non-Metallic Conduit | | LF | | | 110 | | 110 | | | | | | | |
| X | 2545.531 | Underground Wire 1 Cond No 6 | | LF | | | 330 | | 330 | | | | | | | |
| P | 2545.602 | Install Lighting Unit | (7) | EA | | | 2 | | 2 | | | | | | | |
| P | 2550.602 | Install Wood Post | | EA | | | 2 | | 2 | | | | | | | |
| J | 2554.501 | Traffic Barrier Design Special | | LF | | | 25 | | 25 | | | | | | | |
| J | 2554.501 | Traffic Barrier Design B8338 | | LF | | | 75 | | 75 | | | | | | | |
| J | 2554.523 | End Treatment - Energy Absorbing Terminal | (17) | EA | | | 1 | | 1 | | | | | | | |
| | 2554.615 | Impact Attenuator | | Amby | | | 12 | | 12 | | | | | | | |
| | 2554.615 | Relocate Impact Attenuator | | Amby | | | 7 | | 7 | | | | | | | |
| J | 2557.501 | Wire Fence Design Special Vinyl Coated | (18) | LF | | | 3258 | | 3258 | | | | | | | |
| J | 2557.516 | Pedestrian Gate Design Special | | EA | | | 12 | | 12 | | | | | | | |
| J | 2557.517 | Vehicular Gate-Double | | EA | | | 1 | | 1 | | | | | | | |
| P | 2557.602 | Install Ornamental Metal Gate | | EA | | | 2 | | 2 | | | | | | | |
| J | 2557.603 | Temporary Fence Design Special | (18) | LF | | | 550 | | 550 | | | | | | | |
| J | 2557.603 | Wooden Fence | | LF | | | 2610 | | 2610 | | | | | | | |
| J | 2557.603 | Install Chain Link Fence | | LF | | | 30 | | 30 | | | | | | | |
| J | 2557.603 | Fence, Cedar Split Rail | | LF | | | 155 | | 155 | | | | | | | |
| | 2563.601 | Traffic Control | | LS | | | 1 | | 0.87 | | 0.11 | | 0.00 | | 0.02 | |
| | 2563.602 | Portable Concrete Barrier Delineator | | EA | | | 770 | | 770 | | | | | | | |
| | 2563.610 | Police Officer | | Hour | | | 40 | | 40 | | | | | | | |
| | 2563.613 | Portable Changeable Message Sign | | UDAY | | | 96 | | 96 | | | | | | | |
| | 2563.618 | Construction Sign-Special | | SF | | | 112 | | 112 | | | | | | | |
| R | 2564.531 | Sign Panels type C | | SF | | | 253.65 | | 253.65 | | | | | | | |
| R | 2564.550 | Delineator Type X4-13 | | EA | | | 2 | | 2 | | | | | | | |
| R | 2564.550 | Sign Type Special | (19) | EA | | | 6 | | 6 | | | | | | | |
| R | 2564.552 | Hazard Marker X4-2 | | EA | | | 8 | | 8 | | | | | | | |
| S | 2564.537 | Install Sign | | EA | | | 2 | | 2 | | | | | | | |
| S | 2564.602 | Install Sign Type Special | (8) | EA | | | 2 | | 2 | | | | | | | |
| | 2565.601 | Traffic Control Interconnection | (30) | LS | | | 1 | | 1 | | | | | | | |
| | 2565.616 | Revise Signal System | | SYS | | | 1 | | 1 | | | | | | | |
| T | 2571.501 | Coniferous Tree 6' Ht B&B | | Tree | | | 106 | | | | | | | | 106 | |
| T | 2571.502 | Deciduous Tree 1.75" Cal BR | (24) | Tree | | | 27 | | | | | | | | 27 | |
| T | 2571.502 | Deciduous Tree 2.5" Cal B&B | | Tree | | | 96 | | | | | | | | 96 | |
| T | 2571.504 | Coniferous Shrub 2.5' Ht Cont | | Shrb | | | 9 | | | | | | | | 9 | |
| T | 2571.505 | Deciduous Shrub 2.5' Ht Cont | | Shrb | | | 21 | | | | | | | | 21 | |
| T | 2571.505 | Deciduous Shrub 3' Ht Cont | | Shrb | | | 46 | | | | | | | | 46 | |
| T | 2571.507 | Perennial No 1 Cont | | PLT | | | 2431 | | | | | | | | 2431 | |
| T | 2571.507 | Perennial No 2 Cont | | PLT | | | 625 | | | | | | | | 625 | |
| U | 2573.502 | Silt Fence, Type HI | | LF | | | 10262 | | 10262 | | | | | | | |
| V | 2573.530 | Storm Drain Inlet Protection | | EA | | | 215 | | 215 | | | | | | | |
| U | 2573.533 | Sediment Control Log Type Compost | | LF | | | 2529 | | 2529 | | | | | | | |
| | 2573.550 | Erosion Control Supervisor | | LS | | | 1 | | 1 | | | | | | | |
| | 2573.602 | Temporary Rock Construction Entrance | | EA | | | 4 | | 4 | | | | | | | |
| Q | 2574.525 | Filter Topsoil Borrow Special | (25) | CY | (P) | | 1849 | | | | 1849 | | | | | |
| U | 2574.525 | Loam Topsoil Borrow | | CY | (P) | | 4481 | | 4481 | | | | | | | |
| U | 2575.505 | Sodding Type Lawn | | SY | | | 6341 | | 6341 | | | | | | | |
| Q | 2575.513 | Mulch Material Type 6 | (20) | CY | | | 214 | | | | | | | | 214 | |
| Q | 2575.513 | Mulch Material Type 9 | | CY | | | 474 | | | | | | | | 474 | |
| U | 2575.572 | Rapid Stabilization Method 4 | | SY | | | 4596 | | 4596 | | | | | | | |
| U | 2575.571 | Rapid Stabilization Method 3 | (23) | MGal | | | 17.41 | | 17.41 | | | | | | | |
| | 2582.501 | Pavt Mssg Paint | | SF | | | 64 | | 64 | | | | | | | |
| | 2582.501 | Pavt Mssg Preform Tape Ground In | | SF | | | 176 | | 176 | | | | | | | |
| | 2582.502 | 6" Dotted Line White-Paint | | LF | | | 57 | | 57 | | | | | | | |
| | 2582.502 | 4" Solid Line White-Paint | | LF | | | 1744 | | 1744 | | | | | | | |
| | 2582.502 | 4" Broken Line White-Paint | | LF | | | 2200 | | 2200 | | | | | | | |
| | 2582.502 | 4" Solid Line Yellow-Paint | | LF | | | 890 | | 890 | | | | | | | |
| | 2582.502 | 4" Dotted Line Yellow-Paint | | LF | | | 1953 | | 1953 | | | | | | | |
| | 2582.502 | 4" Double Solid Line Yellow-Paint | | LF | | | 18929 | | 18929 | | | | | | | |
| | 2582.502 | 8" Solid Line White-Epoxy | | LF | | | 200 | | 200 | | | | | | | |
| | 2582.502 | 4" Broken Line White-Epoxy | | LF | | | 2745 | | 2745 | | | | | | | |
| | 2582.502 | 4" Solid Line White-Epoxy-Gr In | | LF | | | 950 | | 950 | | | | | | | |
| | 2582.502 | 4" Double Solid Line Yellow-Epoxy-Gr In | | LF | | | 645 | | 645 | | | | | | | |
| | 2582.503 | Crosswalk Pref Thermo Gr In | | SF | | | 450 | | 450 | | | | | | | |

| <u>BASIS FOR ESTIMATED QUANTITIES</u> | |
|---------------------------------------|-----------------|
| AGGREGATE BASE CLASS 5 | 140 LB/CU FT |
| BITUMINOUS MIXTURES | 112 LB/SQ YD/IN |
| TACK COAT | 0.05 GAL/SQ YD |

NOTES:

- (7) GROUND LIGHT.
- (8) BRICK & MORTAR MONUMENT SIGNS.
- (17) SHALL BE CAT-350, BRAKEMASTER OR X-MAS.
- (18) 60" HIGH CHAIN LINK FENCE.
- (19) STREET NAME SIGNS, SEE DETAILS.
- (20) HARDWOOD MULCH.
- (23) INCLUDES TEMP & PERM SEEDING.
- (24) TREES FURNISHED BY HENN CO.
- (25) FOR FILTRATION TRENCHES.
- (30) WITHOUT FIBEROPTIC. INCLUDES HANDHOLES, CONDUCTOR & GROUNDING.

I HEREBY CERTIFY THAT THIS PLAN WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.

| REVISIONS | DESCRIPTION |
|-----------|-------------|
|-----------|-------------|

| | |
|----|--|
| BY | |
|----|--|



CITY OF
BLOOMINGTON
MINNESOTA

1700 W 98TH ST.
BLOOMINGTON MN 55431
PHONE (952) 563-8700

ENGINEERING DIVISION
PUBLIC WORKS DEPARTMENT

STATEMENT OF ESTIMATED QUANTITIES

2016-201 NORMANDALE BLVD. IMP. PROJ.

S.P. 107-020-065
S.P. 027-634-009

SHEET:
4 OF 200

Drawing name: H:\PROJECTS\2016\2016-201 Normandale Blvd\Cod Files\Plans\16-201 SEQ-Tabs.dwg -- Printed: Aug 08, 2016 -- 1:41pm

| J | | | | | | | | | | | | | | | | | |
|---------------------------------|---------|--------|------------------|---------|-----------------|--------------|-------------|------------|-------------|-------------|-----------------|-----------------|-----------|------------|---------------|------------|---------|
| PROPOSED FENCE & RETAINING WALL | | | | | | | | | | | | | | | | | |
| LOCATION | | | | WOODEN | WIRE FENCE DES | FENCE, CEDAR | TEMP FENCE | INST CHAIN | PED GATE | VEHICULAR | TRAFFIC BARRIER | TRAFFIC BARRIER | END TRTMT | PREFAB MOD | STEEL SHEET | REINFORCED | REMARKS |
| ALIGNMENT | STATION | | | FENCE | SP VINYL COATED | SPLIT RAIL | DESIGN SPEC | LINK FENCE | DESIGN SPEC | GATE-DOUBLE | DES B8338 | DES SPECIAL | - E.A.T. | BLOCK WALL | PILING (PERM) | CONC CAP | |
| | FROM: | TO: | OFFSET | (LinFt) | (LinFt) | (LinFt) | (LinFt) | (LinFt) | (Each) | (Each) | (LinFt) | (LinFt) | (Each) | (SqFt) | (SqFt) | (LinFt) | |
| SB NORMANDEALE BLVD | 113+75 | 115+90 | 39' - 48' LT | 216 | | | | | | | | | | 1276 | | | WALL A |
| NB NORMANDEALE BLVD | 115+65 | 120+85 | 32' - 36' RT | | 520 | | | | | | | | | 4375 | | | WALL B |
| SB NORMANDEALE BLVD | 122+35 | 128+22 | 30.5' - 47.0 LT | 596 | | | | | 1 | | | | | 4411 | | | WALL C |
| SB NORMANDEALE BLVD | 122+70 | 127+85 | 37.5' LT | | | | | | | | | | | 3597 | | | WALL D |
| SB NORMANDEALE BLVD | 123+65 | 125+85 | 44.5' LT | | | | | | | | | | | 1542 | | | WALL E |
| SB NORMANDEALE BLVD | 125+75 | 127+50 | 53.0' - 61.1' LT | | | | 175 | | | | | | | | | | |
| NB NORMANDEALE BLVD | 128+35 | 132+45 | 30.5' - 44.6' RT | 430 | | | | | 3 | | | | | | | | |
| SB NORMANDEALE BLVD | 129+12 | 132+83 | 30.5' - 47.1' LT | 374 | | | | | | | | | | | | | |
| NB NORMANDEALE BLVD | 133+61 | 137+26 | 33.9' - 41.5' RT | | | | 375 | | | | | | | | | | |
| NB NORMANDEALE BLVD | 133+61 | 136+00 | 30.5' - 40.0' RT | 272 | | | | | 3 | | | | | | | | |
| SB NORMANDEALE BLVD | 133+67 | 138+73 | 30.5' - 94.1' LT | | | | | | | | | | | 3886 | | | WALL F |
| SB NORMANDEALE BLVD | 134+25 | 138+22 | 37.5' - 45.0' LT | | | | | | | | | | | 2908 | | | WALL G |
| SB NORMANDEALE BLVD | 134+70 | 135+97 | 44.5' LT | | | | | | | | | | | 721 | | | WALL H |
| NB NORMANDEALE BLVD | 135+26 | | 30.5' - 40.5' RT | | | | | 10 | | | | | | | | | |
| NB NORMANDEALE BLVD | 136+00 | 140+50 | 30.5' - 32.5' RT | 450 | | | | | 2 | | | | | | | | |
| NB NORMANDEALE BLVD | 136+25 | | 30.5' - 40.5' rt | | | | | 10 | | | | | | | | | |
| SB NORMANDEALE BLVD | 136+31 | 137+92 | 44.5' LT | | | | | | | | | | | 1019 | | | WALL I |
| SB NORMANDEALE BLVD | 136+51 | 136+81 | 61.5' lt | 30 | | | | | 1 | | | | | | | | |
| NB NORMANDEALE BLVD | 137+26 | | 30.5' - 40.5' rt | | | | | 10 | | | | | | | | | |
| NB NORMANDEALE BLVD | 138+50 | 145+18 | 33.0' - 35.0' rt | | | | | | | | | | | 7049 | | | WALL J |
| SB NORMANDEALE BLVD | 138+75 | 140+24 | 30.5' - 51.0' LT | | | 155 | | | | | | | | | | | |
| NB NORMANDEALE BLVD | 140+50 | 144+00 | 30.5' - 32.5' RT | | 350 | | | | | | | | | | | | |
| NB NORMANDEALE BLVD | 144+00 | 145+20 | 32.5' RT | | 120 | | | | | | | | | | | | |
| NB NORMANDEALE BLVD | 145+40 | 146+75 | 32.5' RT | | | | | | | | | | | 926 | | | WALL K |
| NB NORMANDEALE BLVD | 145+80 | 146+55 | 39.5' RT | | | | | | | | | | | 425 | | | WALL L |
| SB NORMANDEALE BLVD | 146+12 | 148+54 | 38.3' - 43.0' LT | 242 | | | | | 2 | | | | | | | | |
| NB NORMANDEALE BLVD | 146+95 | 163+08 | 32.0' RT | | | | | | | | | | | | 37938 | 1615 | WALL M |
| NB NORMANDEALE BLVD | 146+95 | 152+00 | 32.5' RT | | 505 | | | | | | | | | | | | |
| SB NORMANDEALE BLVD | 149+75 | 151+35 | 30.5' LT | | | | | | | | | | | 958 | | | WALL N |
| NB NORMANDEALE BLVD | 152+00 | 160+00 | 32.5' RT | | 800 | | | | | | | | | | | | |
| NB NORMANDEALE BLVD | 160+00 | 165+50 | 32.5' RT | | 550 | | | | | 1 | | | | | | | |
| NB NORMANDEALE BLVD | 165+00 | 167+70 | 32.5'-47.0' RT | | 223 | | | | | | | | | | | | |
| NB NORMANDEALE BLVD | 166+94 | 168+83 | 22.0' - 24.5' RT | | 190 | | | | | | | | | | | | |
| NB NORMANDEALE BLVD | 167+56 | 168+84 | 21.0' - 24.0' RT | | | | | | | | 75 | 25 | 1 | | | | |
| TOTAL PROJECT | | | | 2610 | 3258 | 155 | 550 | 30 | 12 | 1 | 75 | 25 | 1 | 33093 | 37938 | 1615 | |

| K | | | | | | | | | | | | | | |
|---------------------|---------|--------|-----------------|-------------|-------------|-------------|-------------|-------------|-------------|----------|---------------|--------------|----------------|-------------------|
| PROPOSED DRAINAGE | | | | | | | | | | | | | | |
| LOCATION | | | | 12" RC PIPE | 15" RC PIPE | 18" RC PIPE | 24" RC PIPE | 27" RC PIPE | 30" RC PIPE | GRANULAR | RANDOM | DRAIN TILE | 8" PVC PIPE | REMARKS |
| ALIGNMENT | STATION | | | APRON | APRON | APRON | APRON | APRON | APRON | FILTER | RIPRAP CL III | (8" PERF PE) | DRAIN CLEANOUT | |
| | FROM: | TO: | OFFSET | (Each) | (Each) | (Each) | (Each) | (Each) | (Each) | (CY) | (CY) | (LF) | (Each) | |
| SB NORMANDEALE BLVD | 118+00 | 120+05 | 16' LT - 62' RT | | | | | | | | | 1619 | 2 | |
| SB NORMANDEALE BLVD | 122+00 | 122+35 | 14' - 31' LT | | | | | | | | | 50 | | WALL C TO CB 21 |
| SB NORMANDEALE BLVD | 127+45 | 130+53 | 17' - 29' RT | | | | | | | | | 568 | 5 | |
| SB NORMANDEALE BLVD | 136+76 | 140+37 | 14' - 29' RT | | | | | | | | | 609 | 5 | |
| SB NORMANDEALE BLVD | 138+73 | 140+37 | 14' - 31' LT | | | | | | | | | 180 | | WALL F TO CB 50 |
| SB NORMANDEALE BLVD | 142+28 | | 38.8' LT | | | 1 | | | | | | | | INLET |
| NB NORMANDEALE BLVD | 142+32 | | 67.0' RT | | | | 1 | | | 0.8 | 9.2 | | | |
| NB NORMANDEALE BLVD | 142+93 | | 67.5' RT | | | | | 1 | | 0.9 | 9.9 | | | |
| SB NORMANDEALE BLVD | 143+29 | 149+41 | 14' - 32' RT | | | | | | | | | 1216 | 7 | |
| SB NORMANDEALE BLVD | 144+00 | | 37.0' LT | 1 | | | | | | | | | | INLET |
| NB NORMANDEALE BLVD | 146+75 | 147+50 | 14' - 33' RT | | | | | | | | | 93 | | WALL K TO CBMH 70 |
| NB NORMANDEALE BLVD | 147+50 | | 55.0' RT | | 1 | | | | | 0.3 | 4.8 | | | |
| SB NORMANDEALE BLVD | 148+31 | | 55.2' LT | | | | 1 | | | | | | | INLET |
| NB NORMANDEALE BLVD | 148+31 | | 55.0' RT | | | | 1 | | | 0.8 | 9.2 | | | |
| SB NORMANDEALE BLVD | 149+00 | 157+00 | 73' LT - 62' RT | | | | | | | | | 2150 | 6 | |
| NB NORMANDEALE BLVD | 149+77 | | 55.0' RT | | | | 1 | | | 0.8 | 9.2 | | | |
| SB NORMANDEALE BLVD | 150+92 | | 14' - 31' LT | | | | | | | | | 17 | | WALL N TO CB 79 |
| NB NORMANDEALE BLVD | 150+92 | | 55.0' RT | | | 1 | | | | 0.4 | 6.4 | | | |
| SB NORMANDEALE BLVD | 157+00 | 160+08 | 16' LT - 62' RT | | | | | | | | | 1044 | | |
| SB NORMANDEALE BLVD | 158+73 | | 43.9' LT | | | | 1 | | | | | | | INLET |
| NB NORMANDEALE BLVD | 159+68 | | 55.0' RT | | | | | | 1 | 1.1 | 12.3 | | | |
| SB NORMANDEALE BLVD | 160+08 | 162+87 | 14' - 28' RT | | | | | | | | | 543 | 3 | |
| TOTAL PROJECT | | | | 1 | 1 | 2 | 5 | 1 | 1 | 5.1 | 61 | 8089 | 28 | |

TABLATIONS J & K



ENGINEERING DIVISION
PUBLIC WORKS DEPARTMENT
2016-201 NORMANDEALE BLVD. IMP. PROJ.

REVISIONS

| DATE | DESCRIPTION | BY |
|--------|-------------|-----|
| 8/8/16 | ADDENDUM 1 | SWD |
| | | |
| | | |
| | | |

I HEREBY CERTIFY THAT THIS PLAN WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.

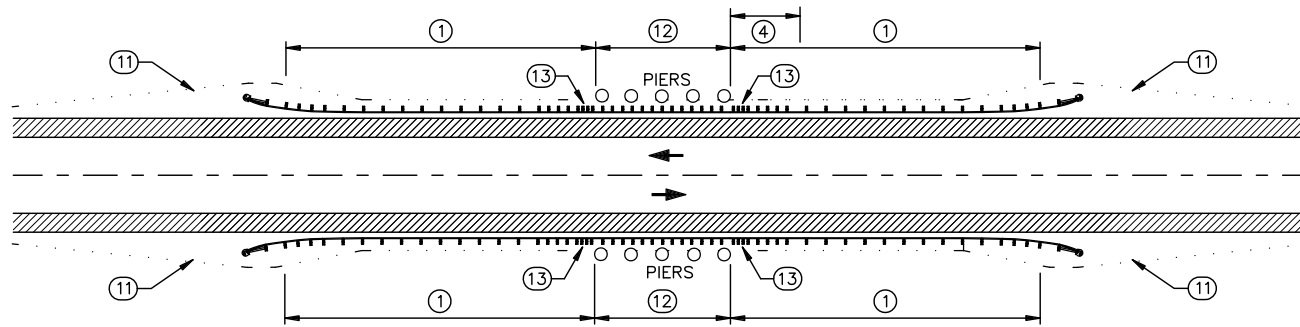
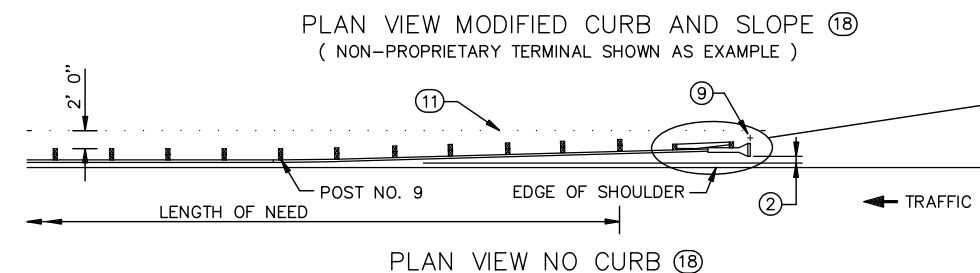
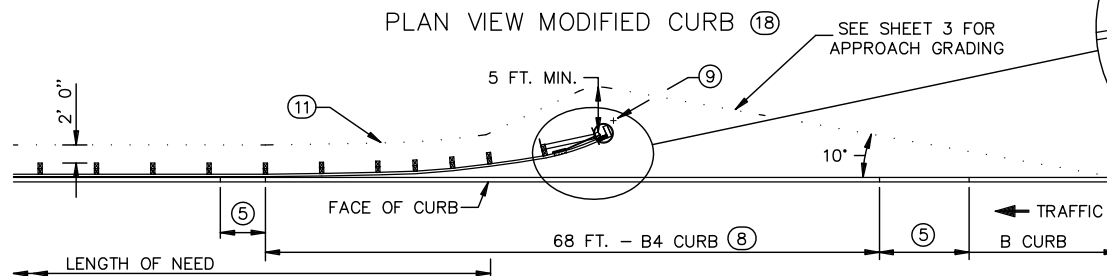
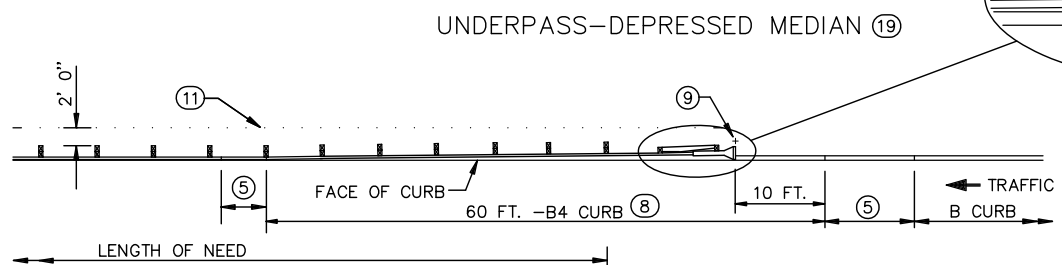
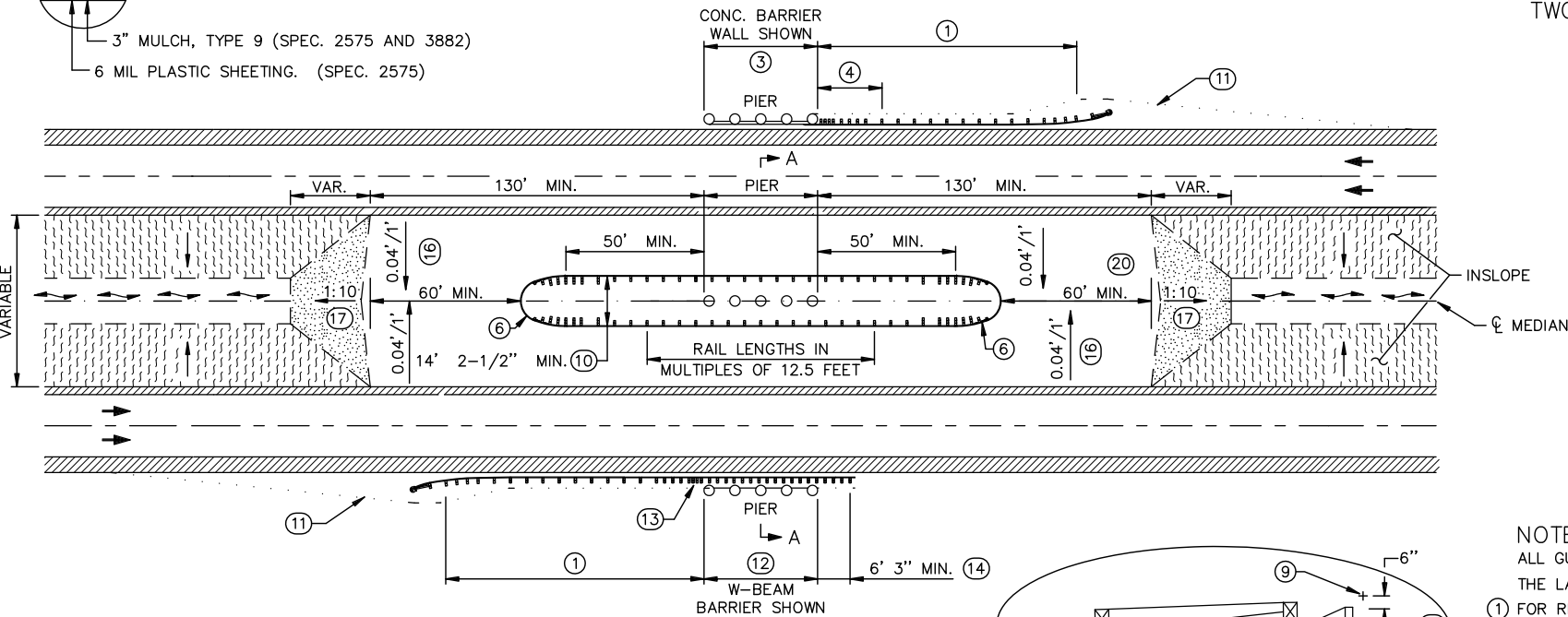
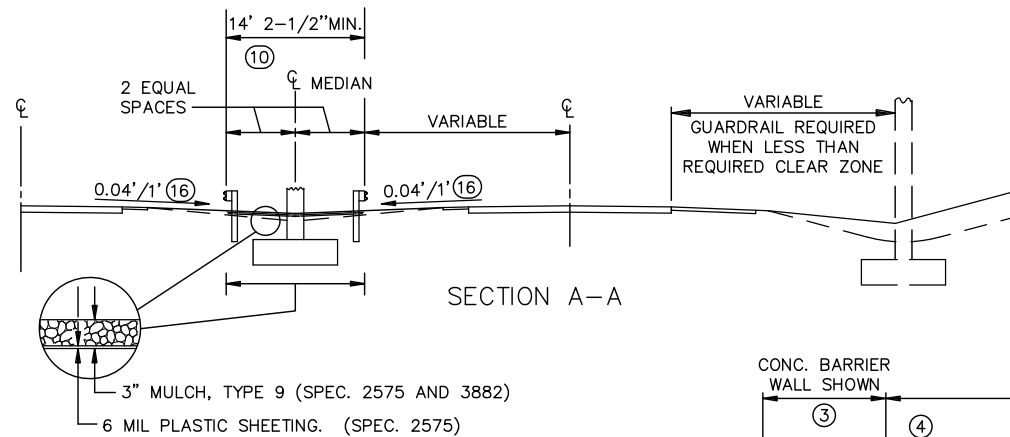
JULIE M. LONG
25847 5/16/16
LIC. # DATE

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CHECKED: RPS
APPROVED: JML

SHEET: 10 OF 200

S.P. 107-020-065
S.P. 027-634-009

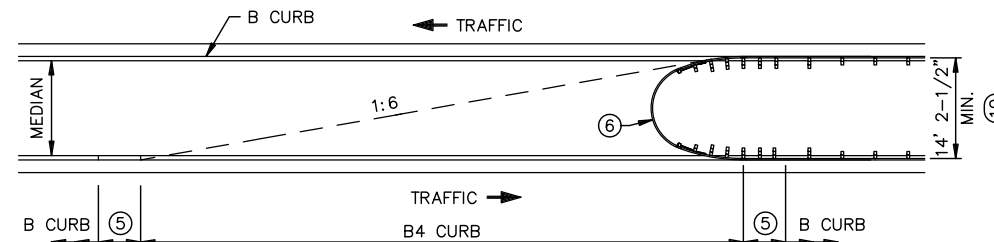
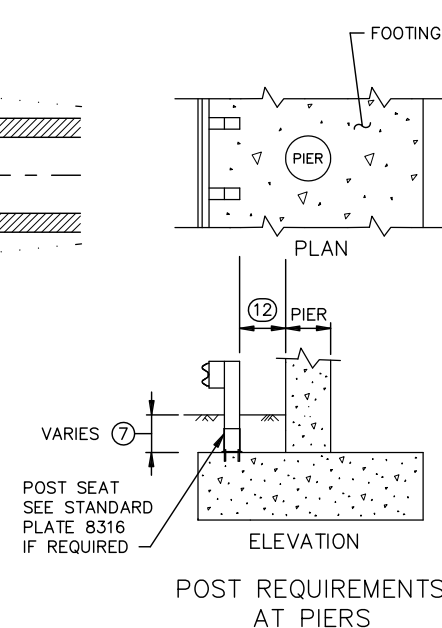
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TWO-WAY UNDERPASS

ESTIMATED DESIGN DEFLECTION TABLE FOR DESIGN B W-BEAM GUARDRAIL

| | |
|---|-------|
| 6' 3" POST SPACING | 3' 0" |
| 6' 3" POST SPACING WITH DOUBLE NESTED RAIL | 2' 8" |
| MODIFIED 3' 1-1/2" POST SPACING | 2' 3" |
| MODIFIED POST SPACING WITH DOUBLE NESTED RAIL | 2' 0" |



MODIFIED CURB AT RAISED MEDIAN

NOTES:

ALL GUARDRAIL POSTS SHALL BE 6 FT. 3 IN. CENTER TO CENTER (DESIGN B), EXCEPT WHERE NOTED. THE LATEST APPROVED VERSION OF STANDARD PLATES SHOWN OR AS INDICATED IN THE PLANS SHALL APPLY.

- FOR REQUIRED LENGTH OF INSTALLATION SEE ROAD DESIGN MANUAL CHAPTER 10.
- THE LAST 50 FT. OF TANGENT TERMINALS MAY BE FLARED AT 1:50 TAPER.
- CONC. BARRIER WALL BETWEEN PIER COLUMNS MAY BE USED. IF USED, SEE BARRIER WALL DETAILS.
- AN APPROVED TRANSITION MUST BE USED.
- 10 FT. CURB TRANSITION, USE IF ADJACENT CURB IS GREATER THAN 4 INCHES.
- THREE BEAM BULLNOSE. SEE STANDARD PLAN 5-297.611 FOR DETAILS.
- IF EMBEDMENT IS GREATER THAN 3 FT. 0 IN., OR IF EMBEDMENT IS 2 FT. 6 IN. TO 3 FT. 0 IN. AND ADJACENT POSTS ARE EMBEDDED 3 FT. 0 IN. OR MORE, POST SEAT IS NOT REQUIRED.
- FOR CURB 6 IN. OR HIGHER, MILL TO 3 IN. HEIGHT.
- SNOWPLOW MARKER (X4-5) WITH A 2 LB./FT. DELINEATOR POST 8 FT. LONG (SPEC. 3401) DRIVEN INTO THE GROUND. EXTEND 3 FT. ABOVE TERMINAL. THE MARKER IS INCIDENTAL FOR WHICH NO DIRECT PAYMENT WILL BE MADE.
- MEASUREMENT IS FROM BACK OF RAIL TO BACK OF RAIL.
- 1:10 OR FLATTER SLOPE P.I.
- SEE ESTIMATED DESIGN DEFLECTION TABLE FOR DESIGN B W-BEAM GUARDRAIL.
- WHEN CLOSE POST SPACING OR DOUBLE NESTED RAIL IS USED, THIS POST SPACING SHOULD EXTEND A MINIMUM OF 12 FT. IN THE DIRECTION OF APPROACHING TRAFFIC.
- THE ANCHOR ASSEMBLY MUST BE LOCATED DOWNSTREAM OF THE HAZARD.
- MARK THE APPROACH END OF PLATE BEAM GUARDRAIL INSTALLATIONS WITH A STRIPED OBJECT MARKER SIZED TO FIT THE END TERMINAL, HAVING ALTERNATING BLACK AND REFLECTIVE YELLOW (WIDE ANGLE PRISMATIC RETROREFLECTIVE SHEETING) STRIPES SLOPED DOWNWARD AT A 45 DEGREE ANGLE TOWARD THE SIDE ON WHICH TRAFFIC PASSES. FOR FLAT END TREATMENTS THE OBJECT MARKER SHALL FIT INSIDE THE RECESSED AREA. FOR ROUNDED END TREATMENTS THE OBJECT MARKER SHALL WRAP AROUND THE CIRCULAR END AND BE MOUNTED SO THE TOP OF THE OBJECT MARKER LINES UP WITH THE TOP OF THE END TREATMENT.
- 0.04 FT./FT. CROSS SLOPE TYPICAL. 0.10 FT./FT. CROSS SLOPE MAXIMUM.
- 1:10 SLOPE OR FLATTER.
- USE ONLY FOR RETROFITS WITH SITE RESTRICTIONS. FOR RETROFITS WITHOUT SITE RESTRICTIONS AND NEW CONSTRUCTION, SEE SHEET 3.
- MEDIAN GRADING DETAIL SHOWN APPLIES TO THREE-BEAM BULLNOSE ONLY.
- DRAINAGE DETAILS SHOWN ON GRADING PLAN.



REVISED: *Christy* APPROVED: *Christy* 5-27-2014
STATE DESIGN ENGINEER

GUARDRAIL INSTALLATIONS AT MEDIANS AND END TREATMENTS

STANDARD PLAN 5-297.601 1 OF 3

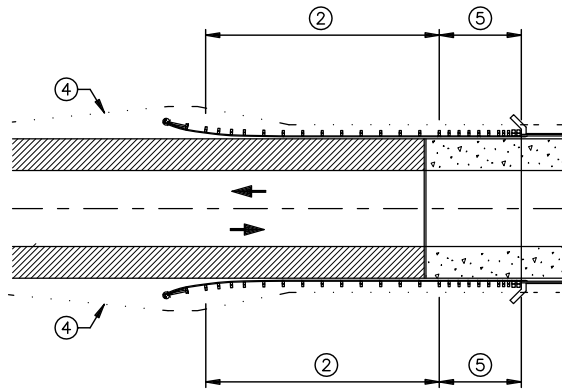
S.P. 107-020-065
S.P. 027-634-009

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| I HEREBY CERTIFY THAT THIS PLAN WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA. | | REVISIONS | | | |
| DRAWN: | SWD | DATE | DESCRIPTION | BY | |
| CHECKED: | JLE | 8/8/16 | ADDENDUM 1 | SWD | |
| APPROVED: | JML | | | | |
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| | | 25847 | 5/16/16 | | |
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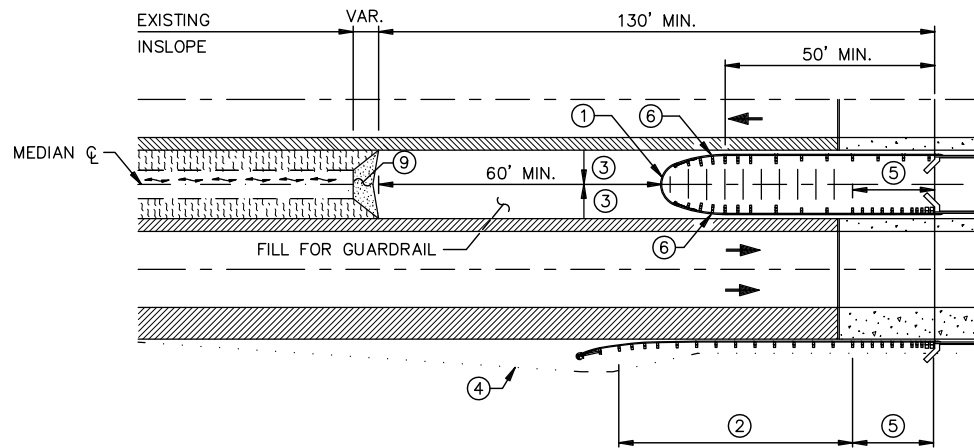
CITY OF BLOOMINGTON MINNESOTA
ENGINEERING DIVISION
PUBLIC WORKS DEPARTMENT
2016-201 NORMANDALE BLVD. IMP. PROJECT

STANDARD DETAILS
GUARDRAIL

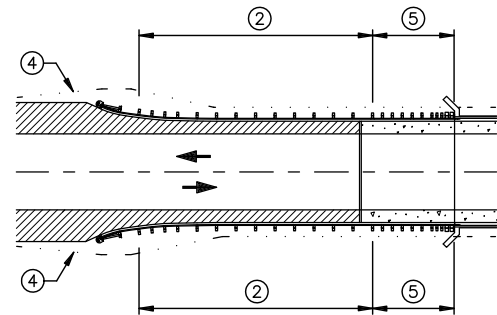
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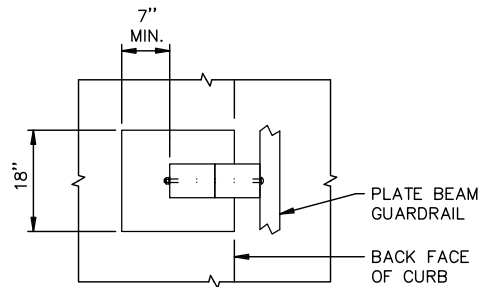
TWO - WAY BRIDGE
WITH FULL SHOULDERS



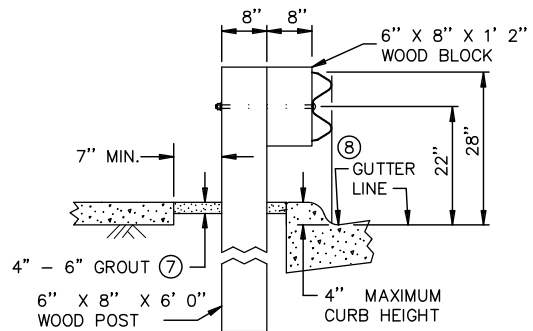
ONE - WAY BRIDGE
WITH FULL RIGHT SHOULDER
(FOR 14' 2-1/2" THRIE BEAM BULLNOSE)



TWO - WAY BRIDGE
WITHOUT FULL SHOULDERS

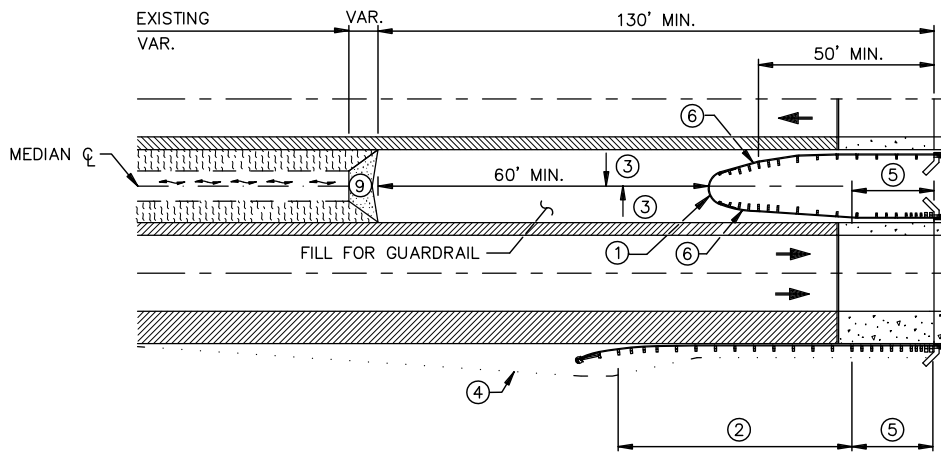


PLAN VIEW



ELEVATION

TYPICAL W-BEAM GUARDRAIL SECTION
AT POST SET IN CONCRETE



ONE - WAY BRIDGE
WITH FULL RIGHT SHOULDER
(FOR MEDIANS WIDER THAN 14' 2-1/2" THRIE BEAM BULLNOSE)

NOTES:

- ALL GUARDRAIL POSTS SHALL BE 6 FT. 3 IN. CENTER TO CENTER (DESIGN B), EXCEPT WHERE NOTED.
- THE LATEST APPROVED VERSION OF STANDARD PLATES SHOWN OR AS INDICATED IN THE PLANS SHALL APPLY.
- ① THRIE BEAM BULLNOSE, SEE STANDARD PLAN 5-297.611 FOR DETAILS.
- ② FOR THE REQUIRED LENGTH SEE ROAD DESIGN MANUAL CHAPTER 10.
- ③ 0.04 FT./FT. CROSS SLOPE TYPICAL, 0.10 FT./FT. CROSS SLOPE MAXIMUM.
- ④ 1:10 OR FLATTER SLOPE P.I.. APPROACH GRADING VARIES WITH TERMINAL TYPE.
- ⑤ PLATE BEAM GUARDRAIL ATTACHMENTS TO FIXED OBJECTS REQUIRE AN APPROVED TRANSITION SECTION.
- ⑥ FOR MEDIANS WIDER THAN THE 14 FT. 2-1/2 IN., BEFORE TAPERING THE APPROACH SIDE, TAPER THE OPPOSING SIDE AS SHOWN ON THE BULLNOSE DESIGN DETAIL. APPROACH TAPER SHOULD NOT EXCEED 1:25 IF THE BARRIER IS WITHIN THE SHY LINE OR 1:15 IF IT IS OUTSIDE.
- ⑦ GROUT MIX (BY VOLUME: 1 PART CEMENT [TYPE 1A], 14 PARTS SAND, 5 PARTS WATER).
- ⑧ PLACE FRONT FACE OF W-BEAM DIRECTLY ABOVE FRONT FACE OF CURB.
- ⑨ 1:10 SLOPE OR FLATTER.



REVISED:
Chitah
APPROVED: 5-27-2014
STATE DESIGN ENGINEER

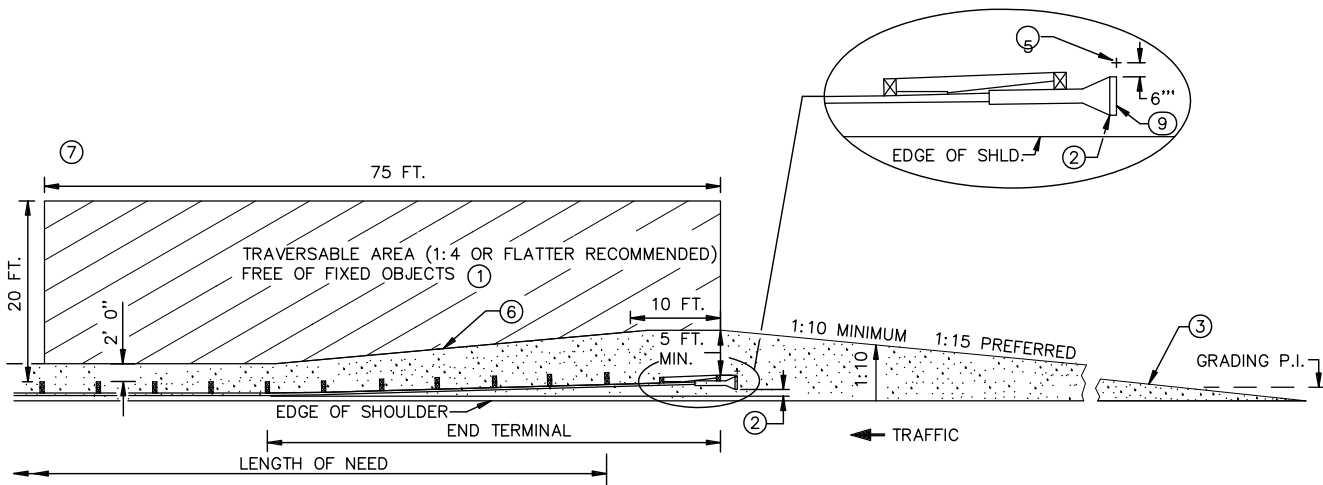
GUARDRAIL INSTALLATIONS AT MEDIANS
AND END TREATMENTS

STANDARD PLAN 5-297.601 2 OF 3

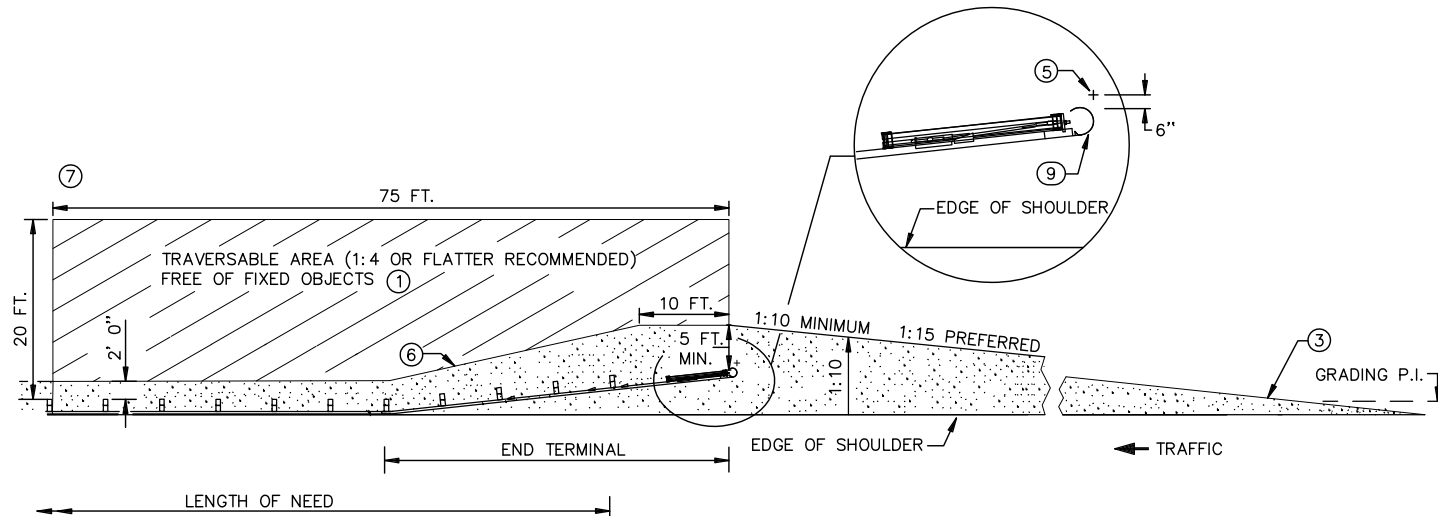
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S.P. 027-634-009

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|---|--------|---|---------------|
| STANDARD DETAILS | | GUARDRAIL | |
| CITY OF BLOOMINGTON MINNESOTA | | ENGINEERING DIVISION PUBLIC WORKS DEPARTMENT | |
| 1700 W. 90TH ST. BLOOMINGTON MN 55431 PHONE (952) 563-8700 | | 2016-201 NORMANDALE BLVD. IMP. PROJECT | |
| REVISIONS | DATE | DESCRIPTION | BY |
| | 8/8/16 | ADDENDUM 1 | SWD |
| I HEREBY CERTIFY THAT THIS PLAN WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA. | DATE | DATE | LIC. # |
| | 25847 | 5/16/16 | JULIE M. LONG |
| DRAWN: | SWD | CHECKED: | JLE |
| APPROVED: | JML | SHEET: | 23B OF 200 |

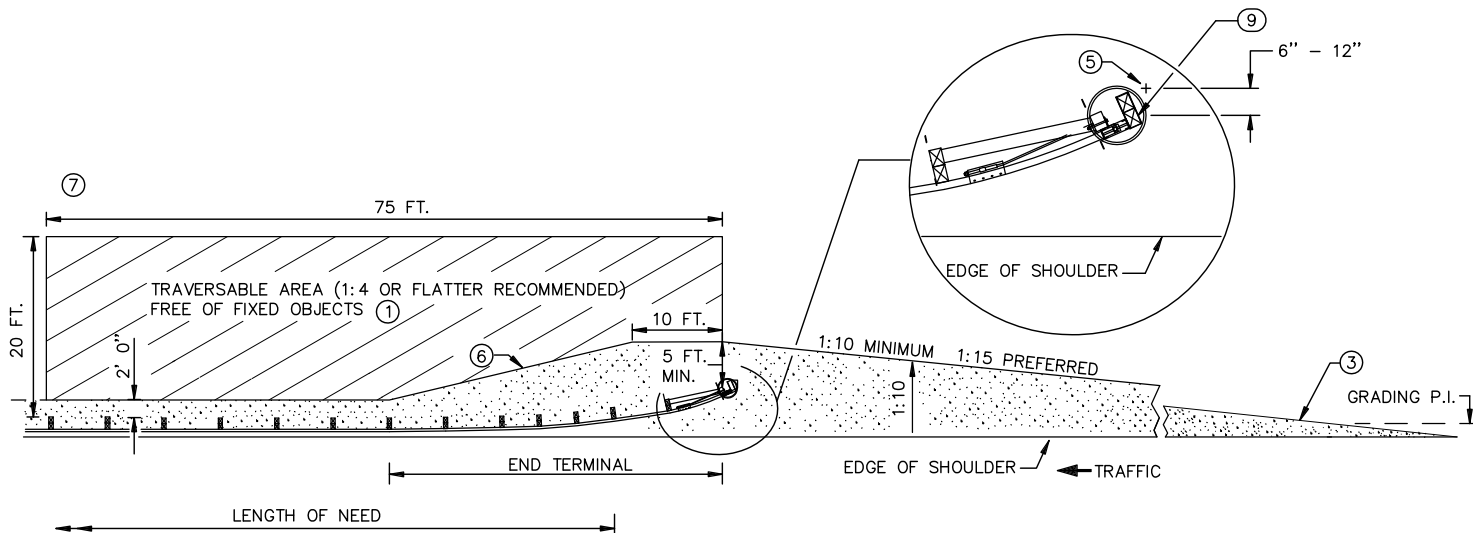
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PLAN VIEW
(PROPRIETARY TANGENT TERMINAL SHOWN AS EXAMPLE)



PLAN VIEW ⑧
(PROPRIETARY FLARED TERMINAL SHOWN AS EXAMPLE)



PLAN VIEW ④ ⑧
(ELT)

NOTES:

- ALL CROSS SLOPES ARE IN FOOT/FOOT UNLESS OTHERWISE NOTED.
ALL GUARDRAIL POSTS SHALL BE 6 FT. 3 IN. CENTER TO CENTER (DESIGN B), EXCEPT WHERE NOTED.
CHANGES (TO SUBJECTS COVERED BY THIS SHEET) INDICATED IN THE PLANS OR ON PLATES WITH MORE RECENT APPROVAL DATES SHALL APPLY.
GRADING AND DRAINAGE HARDWARE ARE NOT INCIDENTAL TO GUARDRAIL INSTALLATION.
- ① SLOPES BETWEEN 1:3 AND 1:4 PERMITTED WHEN 1:4 OR FLATTER IS NOT POSSIBLE. FOR SLOPES STEEPER THAN 1:3 THE AREA IMMEDIATELY BEHIND AND BEYOND THE END TERMINAL SHOULD, AT LEAST, BE SIMILAR IN CROSS SECTION TO THE UNSHIELDED ROADSIDE AREA UPSTREAM OF THE END TERMINAL.
- ② THE LAST 50 FT. OF TANGENT TERMINALS CAN BE FLARED AT 1:50 TAPER.
- ③ WHEN GRADING PLATFORMS ARE BUILT, THEY MUST BE SMOOTHLY TRANSITIONED TO EXISTING SIDE SLOPE SO THE ENTIRE ROADSIDE APPROACH TO THE BARRIER REMAINS TRAVERSABLE, AS WELL AS THE AREA IMMEDIATELY BEHIND IT.

- ④ SEE STANDARD PLATE 8329.
- ⑤ SNOWPLOW MARKER (X4-5) WITH A 2 LB./FT. DELINEATOR POST 8 FT. LONG (SPEC. 3401) DRIVEN INTO THE GROUND. EXTEND 3 FT. ABOVE TERMINAL. THE MARKER IS INCIDENTAL FOR WHICH NO DIRECT PAYMENT WILL BE MADE. MARK BOTH THE BEGINNING AND END OF PLATE BEAM GUARDRAIL INSTALLATION.
- ⑥ 1:10 OR FLATTER SLOPE P.I. GRADUALLY BLEND SLOPE FROM TRAVERSABLE AREA TO STEEP
- ⑦ EXISTING SLOPE (WHEN SLOPE IS STEEPER THAN 1:6).
- ⑧ IF THE TERRAIN BEYOND THE TERMINAL END AND IMMEDIATELY BEHIND THE BARRIER IS NOT SAFELY TRAVERSABLE, A TANGENT (ENERGY- ABSORBING) TERMINAL SHALL BE USED.
- ⑨ MARK THE APPROACH END OF PLATE BEAM GUARDRAIL INSTALLATIONS WITH A STRIPED OBJECT MARKER SIZED TO FIT THE END TERMINAL, HAVING ALTERNATING BLACK AND REFLECTIVE YELLOW (WIDE ANGLE PRISMATIC RETROREFLECTIVE SHEETING). STRIPES SHALL SLOPE DOWNWARD AT A 45 DEGREE ANGLE TOWARD THE SIDE ON WHICH TRAFFIC PASSES. FOR FLAT END TREATMENTS THE OBJECT MARKER SHALL FIT INSIDE THE RECESSED AREA. FOR ROUNDED END TREATMENTS THE OBJECT MARKER SHALL WRAP AROUND THE CIRCULAR END AND BE MOUNTED SO THE TOP OF THE OBJECT MARKER LINES UP WITH THE TOP OF THE END TREATMENT.



REVISED:

Christy R.
 STATE DESIGN ENGINEER

APPROVED:

5-27-2014

GUARDRAIL INSTALLATIONS AT MEDIANS
AND END TREATMENTS
(FOR NEW CONSTRUCTION AND RETROFITS WITHOUT SITE RESTRICTIONS)

STANDARD PLAN 5-297.601

3 OF 3

S.P. 107-020-065
S.P. 027-634-009

REVISIONS

| DATE | DESCRIPTION | BY |
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| 8/8/16 | ADDENDUM 1 | SWD |
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JULIE M. LONG
LIC. # 25847 5/16/16
DATE

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CHECKED: JLE
APPROVED: JML

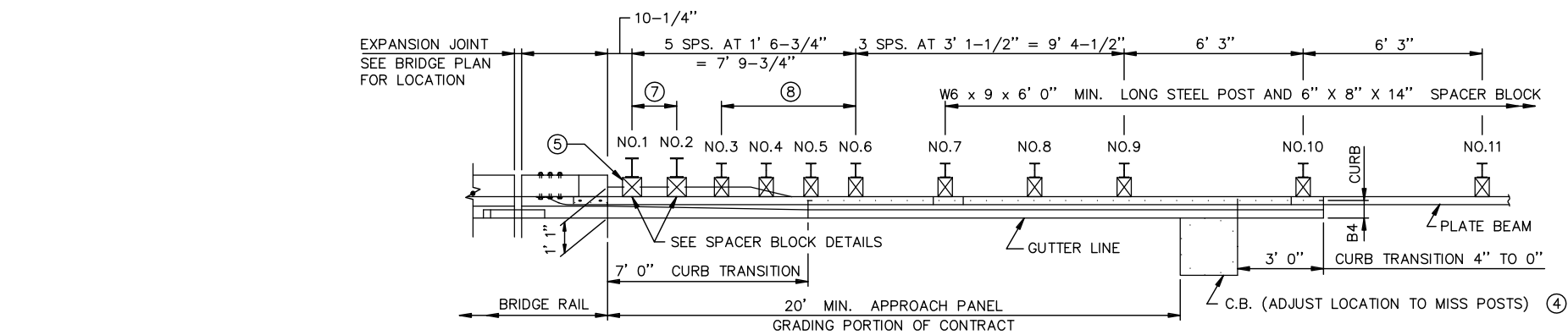
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CITY OF BLOOMINGTON
1700 W. 90TH ST.
BLOOMINGTON MN 55431
PHONE (952) 563-8700
ENGINEERING DIVISION
PUBLIC WORKS DEPARTMENT
2016-201 NORMANDALE BLVD. IMP. PROJECT

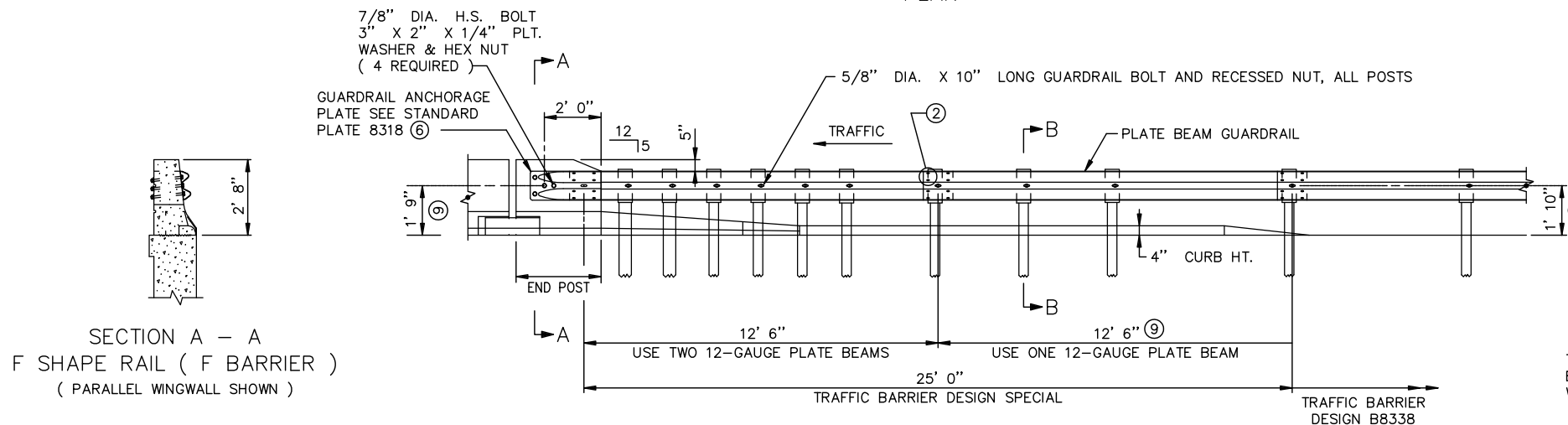
STANDARD DETAILS

GUARDRAIL

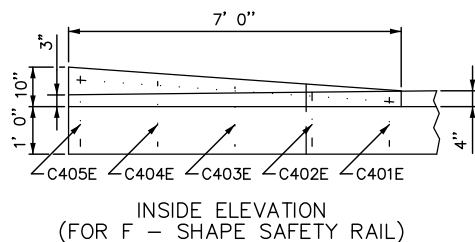
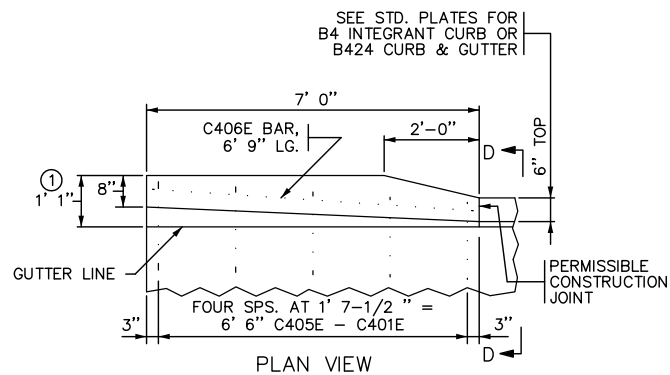
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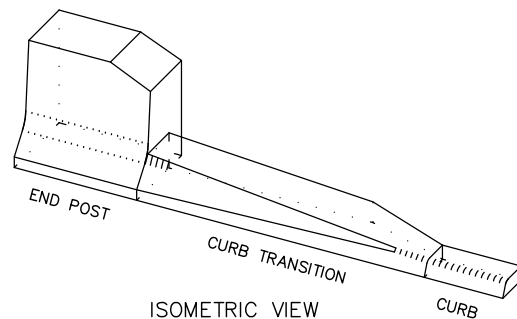
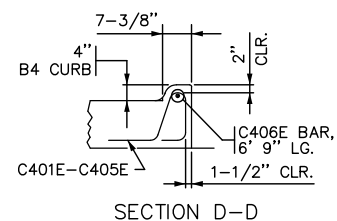
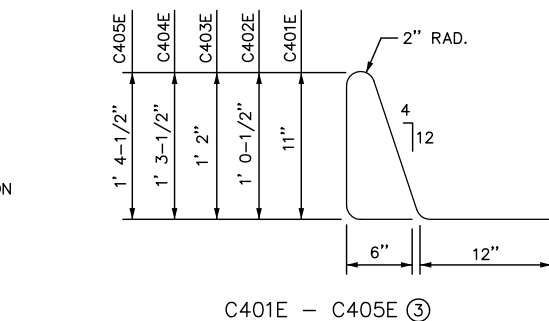
PLAN



ELEVATION



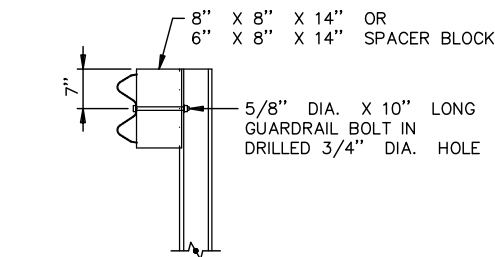
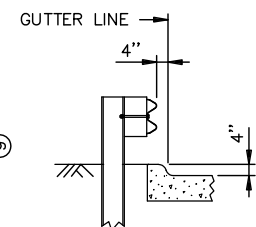
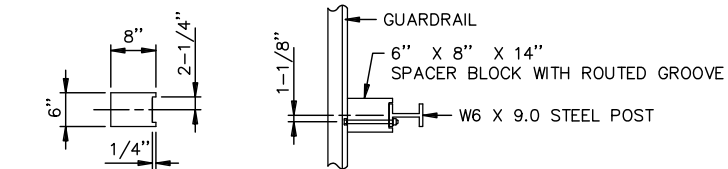
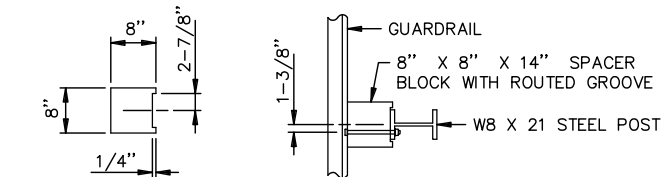
CURB TRANSITION DETAILS
F-SHAPE SAFETY BARRIER TO B4 CURB
WITH W-BEAM GUARDRAIL BARRIER



NOTES:

- ① FROM BACK SIDE OF CURB TRANSITION TO GUTTERLINE.
- ② 5/8" DIA. X 1-1/4" LONG GUARDRAIL BOLTS AND NUTS
TYPICAL AT SPLICES.
- ③ AS PER MNDOT 3301, USE EPOXY COATED GRADE 60 REINFORCEMENT
BARS.
- ④ SEE ROAD PLANS TO VERIFY ACTUAL DIMENSION AND LOCATION.
- ⑤ ADDITIONAL BLOCKING MAY BE REQUIRED TO CLEAR BRIDGE
STRUCTURE. VERIFY IN FIELD.
- ⑥ SANDWICH ANCHOR PLATE BETWEEN RAIL BEAMS.
- ⑦ POSTS 1 AND 2 TO BE W8 x 21 x 8' 0" MINIMUM LONG STEEL POST
AND 8" X 8" X 14" SPACER BLOCK.
- ⑧ POSTS 3, 4, 5, AND 6 TO BE W6 x 9 x 6' 0" MIN. LONG STEEL POST
AND 6" X 8" X 14" SPACER BLOCK.
- ⑨ GUARDRAIL CENTERLINE HEIGHT IS 1'-9" FROM 0' TO 12'-6" FROM
BRIDGE. HEIGHT TRANSITIONS FROM 1'-9" TO 1'-10" BETWEEN 12'-6"
AND 25' FROM BRIDGE.

TRAFFIC BARRIER DESIGN SPECIAL



SPACER BLOCK DETAILS

REVISIONS

| DATE | DESCRIPTION | BY |
|--------|-------------|-----|
| 8/8/16 | ADDENDUM 1 | SWD |

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JULIE M. LONG
LIC. # 25847 5/16/16
DATE

DRAWN: SWD
CHECKED: JLE
APPROVED: JML

SHEET:
23D OF 200

CITY OF
BLOOMINGTON
MINNESOTA
1700 W. GUTH ST.
BLOOMINGTON MN 55431
PHONE (952) 563-8700
ENGINEERING DIVISION
PUBLIC WORKS DEPARTMENT
2016-201 NORMANDALE BLVD. IMP. PROJECT

STANDARD DETAILS

GUARDRAIL



STATE DESIGN ENGINEER

REVISED:

APPROVED:

5-27-2014

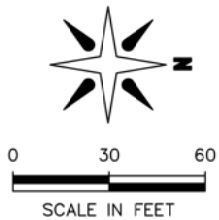
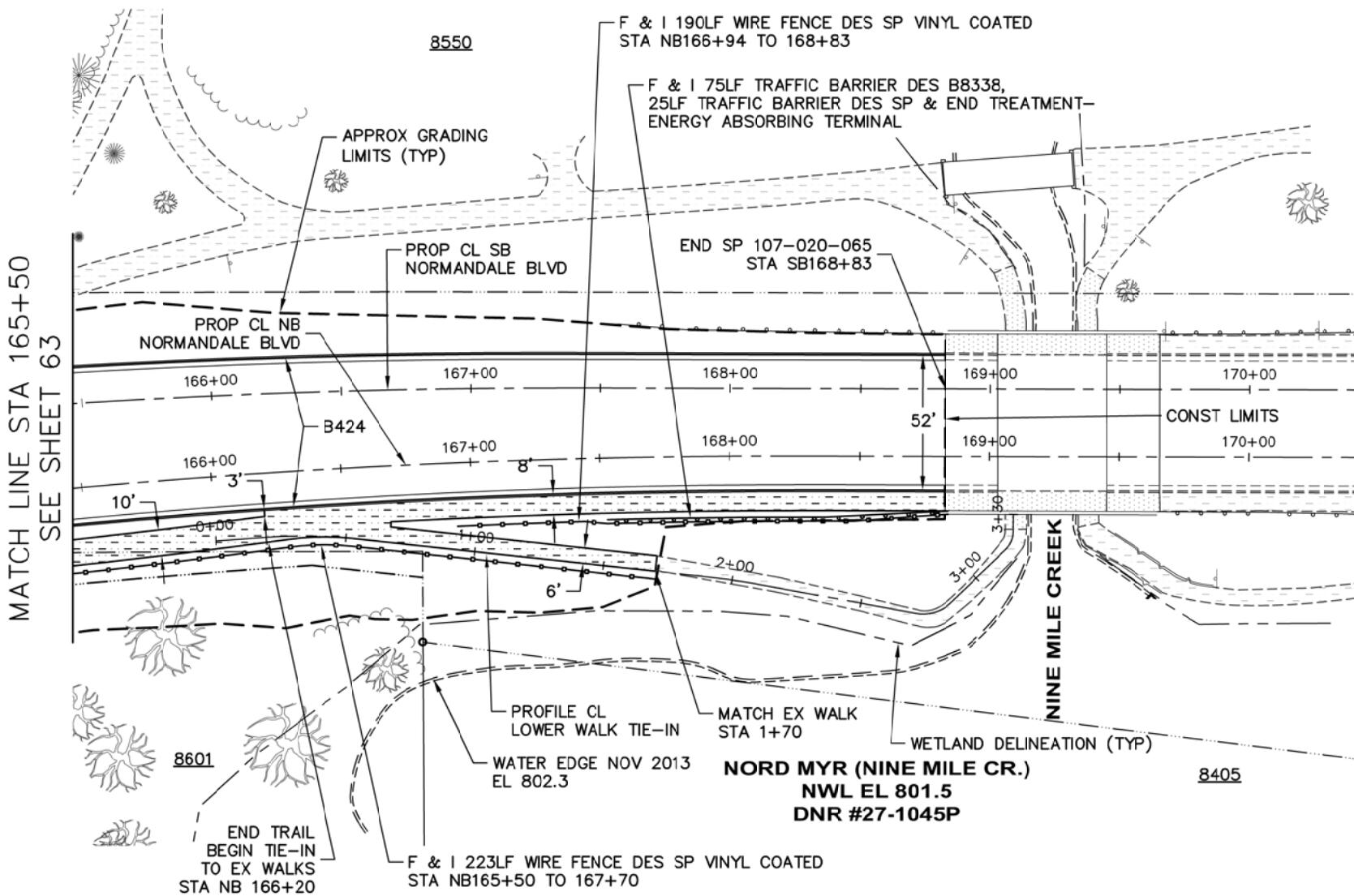
GUARDRAIL INSTALLATIONS AT MEDIANS
AND END TREATMENTS
(FOR NEW CONSTRUCTION AND RETROFITS WITHOUT SITE RESTRICTIONS)

STANDARD PLAN 5-297.603

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S.P. 027-634-009

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CONSTRUCTION PLAN

NORMANDE BLVD (CSAH 34)
FROM STA 165+50 TO 169+14

CITY OF BLOOMINGTON MINNESOTA
1700 W 80TH ST
BLOOMINGTON MN 55431
PHONE (952) 563-8700

ENGINEERING DIVISION
PUBLIC WORKS DEPARTMENT

2016-201 NORMANDE BLVD. IMP. PROJ.

REVISIONS

| DATE | DESCRIPTION | BY |
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| 8/8/16 | ADDENDUM 1 | SWD |
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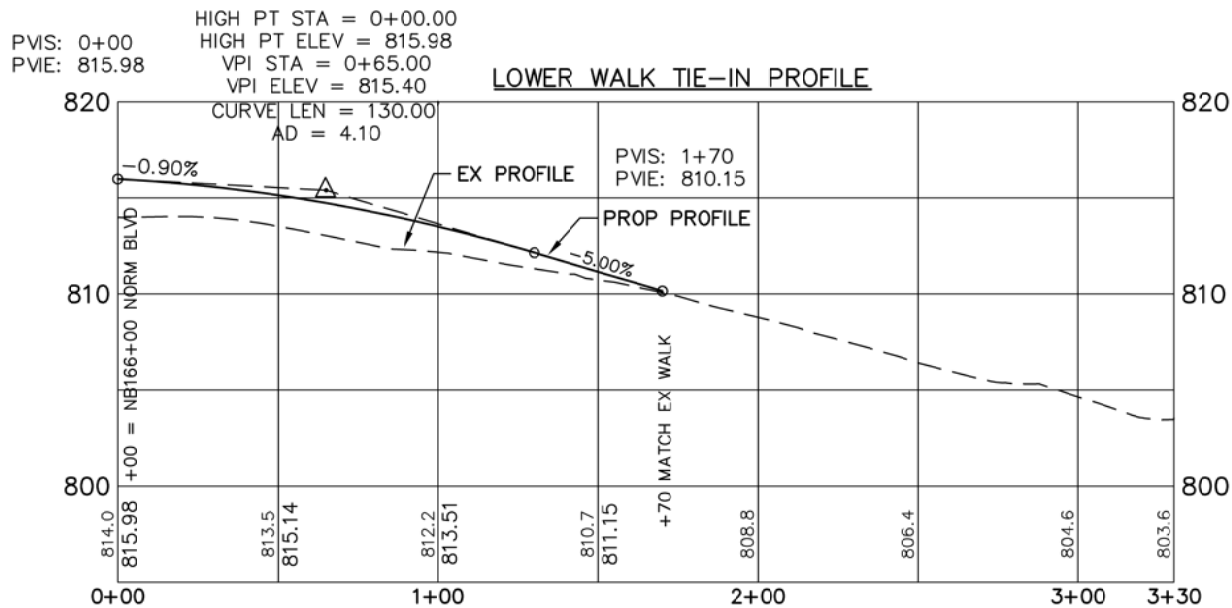
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JULIE M. LONG
25847
5/16/16
LIC. #

DRAWN: SWD
CHECKED: RPS
APPROVED: JML

S.P. 107-020-065
S.P. 027-634-009

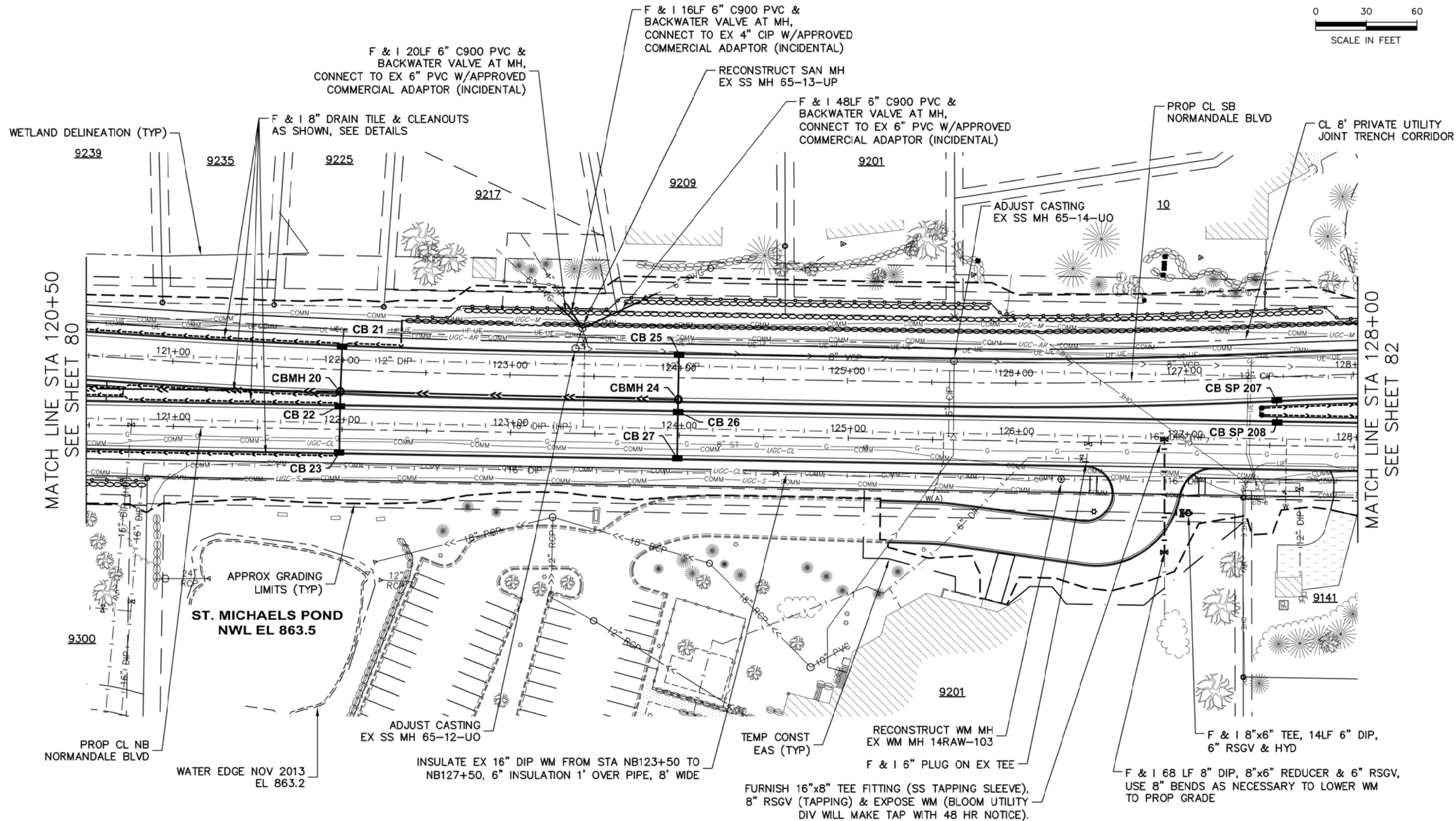
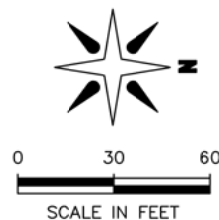
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64 OF 200



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UTILITY PLAN

NORMANDALE BLVD (CSAH 34)
FROM STA 120+50 TO 128+00



NOTE:
-FILTRATION TRENCH INLETS IDENTIFIED BY "CB
SP 2XX" (CATCH BASIN DESIGN SPEC), SEE
LANDSCAPE PLAN FOR DETAILS.

UTILITY PLAN
NORMANDALE BLVD (CSAH 34)
FROM STA 120+50 TO 128+00

CITY OF
BLOOMINGTON
MINNESOTA
1700 W 80TH ST
BLOOMINGTON MN 55431
PHONE (952) 453-8700
ENGINEERING DIVISION
PUBLIC WORKS DEPARTMENT
2016-201 NORMANDALE BLVD. IMP. PROJ.

| REVISIONS | | |
|-----------|-------------|-----|
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